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ORIGINAL LECTURES.

CLINICAL LECTURES

ON

DISEASES OF THE SKIN.

ILLUSTRATED BY COLOURED ENGRAVINGS.

By WM. JENNER, M.D.

Physician to University College Hospital, and to the Hospital for Sick Children.

LECTURE I. (a)

GENTLEMEN,—Students constantly leave the Hospital without being able to name, or recognise with certainty, the most common diseases of the skin. They seem to be deterred even from attempting to acquire a knowledge of these diseases by their barbarously sounding nomenclature, their innumerable divisions, and countless subdivisions. There is no class of ailments, however, with which, for the patient's sake as well as for your own success, it is more desirable that you should be precisely acquainted; and for these among other reasons:—Diseases of the skin are exceedingly common, and those who suffer from them know at once that they are the subject of them, and can appreciate, as well as you can, every change in them. They are unsightly; and even those who are the plainest in other people's eyes will strive hard to preserve what they consider their beauty unimpaired. A large number of the diseases of the skin are very tractable; at the same time, some are almost or quite incurable; and to confound the one group with the other is a serious matter for the patient, as well as for your own reputation. So much attention has been paid to affections of the skin, and the local disease is so patent to direct treatment, that the therapeutics of this branch of pathology is decidedly in advance of that of any other. Remember, however, that to avail yourself of the labours of others—of the vast *materia medica* at your command—you must be able, not only to give a name to the disease under your eye, but also must know by what name it has been described by others. Again: some skin diseases are merely the outward signs of constitutional derangements, derangements of which the patient complains but little, or, it may be, not at all, and for which he certainly would not think of seeking Medical advice; and yet of derangements which you must detect, or all your endeavours to cure the superficial ailment will be made in vain.

All diseases attended with an eruption on the surface, or with any change from the healthy structure, function, or colour of the skin, are skin diseases; and all abnormal states of the hair and nails, inasmuch as the hair follicle is one of the structures of the skin, and the nail a modification of the epithelium, are ranked in the same category. But then, in a few of the diseases attended with an eruption on the surface, the constitutional disease is so profound, and the skin-affection so insignificant a part of the ailment, that it seems unwise longer to speak of them at any length among diseases of the skin. I have already directed your attention to particular cases of small-pox, scarlet, typhus, and typhoid fevers, and I shall now, therefore, only enumerate these diseases and others of a like kind in their place. In other diseases of the skin, the subcutaneous tissues are so deeply involved, that the skin affection constitutes a very small part of the local disease, and the propriety of classing such affections with ordinary skin diseases is more than questionable. The same is true in regard of certain diseases attended with deviation from the healthy functions of the skin.

I trust the fact of my treating of Diseases of the Skin as a special group will not lead you to consider them as differing essentially from diseases of other organs, for they owe their origin to the same kind of causes, agree with them pathologically, run a like course, and have like terminations. In re-

ference to the majority of diseases of the skin, as of other diseases, you have to consider the constitutional state that disposes to the affection, the local condition that renders the skin susceptible, so to say, of the special disease, and the locally acting cause which determines the occurrence of the disease.

Diseases of the skin are as much a speciality as are diseases of the lungs, heart, or liver, but not more so. Like disease of all other organs, diseases of the skin are disposed to by certain constitutional states, and by diseases of other parts, and, like all other organs, the skin, when extensively diseased, leads, perhaps through the medium of the blood, to abnormal conditions of parts not anatomically related to it. For practical purposes, the genera and species of the diseases of the skin that you need to remember are really neither very numerous nor very difficult to recognise, and separate from each other.

As this is to be a course of Lectures on the subject, I must have an arrangement; but, as the Lectures are to be essentially clinical, I shall have to deviate from my arrangement, seeing that it will not always be possible to obtain, at a given hour and on a particular day, cases to illustrate the points that at that time ought, if we adhered to our arrangement, to come before us. So, having laid down an order for the arrangement of diseases of the skin, I shall have to select diseases from that order irregularly, always keeping in view, that my object is to enable you, at the end of the course, to distinguish practically from each other, and to treat all the more ordinary forms of diseases of the skin, to name them, and to understand what others signify by the same name, or by what name they have described the same affection.

No doubt, theoretically considered, the best and primary division of diseases of the skin is into essentially local diseases and essentially constitutional diseases. And this division would be practically the best, if we could arrange all diseases of the skin under the one or the other head; because you would then know, by the position assigned to any particular disease, its most important pathological character, and also the most important point to be kept in view in its treatment. But this arrangement is impracticable. Our knowledge of diseases of the skin is not precise enough to enable us to refer them severally to the one or the other of these two heads.

We can say that itch is essentially a local disease, and small-pox a constitutional affection; but where shall we place miliaria, seeing that the miliary eruption is excited by some abnormal conditions of the perspiration, *e. g.*, such as occurs in rheumatism? Again, where shall we group urticaria? Urticaria is sometimes excited by certain articles of diet; that is to say, during the digestion of these articles a material enters the blood, or the blood is so modified as to excite the disease of the skin called urticaria. Now, does the fact of the blood being contaminated in this way from the food constitute a claim for urticaria to be ranked as a constitutional affection? It manifestly does so. But, then, the application of certain irritants to the skin produces a disease identical, anatomically, with that induced by the ingestion of substances to which I have just adverted. So that urticaria may be a purely local affection, or the local manifestation merely of a constitutional state. The inconvenience of separating two cases of what is one genus, when considered anatomically, is manifest. If the diseases of the skin of parasitic origin, and those induced by the external application of direct irritants, be excluded, there are very few of them which are not more or less dependent on constitutional derangement. Nay, even parasitic diseases seem to take little hold on the constitutionally sound, and many of those primarily excited by local irritants are kept up by constitutional abnormalities.

A second method of dividing skin diseases into orders is founded on the supposed pathological nature of the local affection, *e. g.*, inflammation-hypertrophy, the orders thus formed being divided into genera according to the structure supposed to be first affected, *e. g.*, the sudoriferous ducts, the sebaceous follicles, the hair follicles, the epithelium. But the fact is, that our knowledge is not yet sufficiently advanced to enable us to determine in the majority of cases either the primary pathological process, or the part of the skin, anatomically considered, first affected. So that this division, which when first proposed to us charms by its appearance of scientific accuracy, is in the present state of medicine practically impossible. The time may come when it will be as useful as it is theoretically pleasing, but to-day it is not that time.

The division of skin diseases which I shall adopt is sub-

(a) During the summers of 1855 and 1856 I delivered at University College Hospital a short series of clinical lectures for the purpose of making the Student practically acquainted with diseases of the skin. The Lectures themselves were illustrated by cases, and the cases compared in the theatre with casts, and published and unpublished drawings, so that the value of these latter might be duly appreciated. The *Medical Times and Gazette* having proposed to give plates printed in colours of the genera described in the Lectures, I have been induced to agree to their publication, and, at the same time, to add somewhat to the course, so as to render it more systematic and complete than was possible in a clinical theatre.

stantially that originally proposed by Willan, and subsequently employed by a large number of writers on the subject. At the same time I shall deviate from Willan's arrangement widely in one or two important particulars. The microscope, by revealing the presence of parasitic plants in certain of the diseases of the skin, and that close study of these same diseases by which we have learned the relation between the plant and the disease, enable us to found a new order, and so, by abstracting certain diseases from some of the genera of Willan, to render those genera infinitely more natural.

The faults of Willan's arrangement are many and obvious, but then it is eminently practical. The diseases grouped together in his arrangement by no means agree pathologically, but then his divisions greatly facilitate diagnosis; they enable you to learn the name of a particular case of disease, and having learned that, you may then determine its pathological and anatomical position, if you please and are able.

Exanthemata.—The diseases of the first group to which I shall direct your attention, have, as their great characteristic, redness, disappearing or diminishing transiently on pressure. Essentially nothing more than an increased quantity of blood in the vessels of a portion of the skin. No vesicles, no pustules, no scales, no elevation of the cutis. Now and then, however, the blood accumulates in such quantity at particular points as to cause a little elevation of the cutis, and if these points are small and circular we have an appearance of papulæ, but the elevation like the redness disappears on pressure, to return, however, when the pressure is removed. True papulæ cannot be removed for an instant by pressure.

The connexion between the hyperæmic cutis and the cuticle covering it is usually diminished either before or during the stage of resolution, and the consequence is, that there is usually a little desquamation of the cuticle while the rash is fading, or after the redness has disappeared. It is highly probable that the loosening of the cuticle is due to the effusion of a small quantity of serosity from the engorged vessels of the surface of the cutis. Now and then fluid is effused in sufficient quantity to raise the cuticle from the cutis: thus in scarlet fever, one of the exanthemata, it is very common to find innumerable vesicles stud the red surface, and in erysipelas the cuticle is occasionally elevated into bullæ. The diseases characterised by red patches disappearing under pressure constitute the order Exanthemata: these diseases are measles, scarlet fever, typhus fever, typhoid fever, erysipelas, erythema, roseola, urticaria.

Hæmorrhagia.—In the Exanthemata the blood is within the vessels of the red part; in the order Hæmorrhagia the blood escapes from its vessels into the substance of the cutis, and so crimson spots unaffected by pressure are formed. There are only two diseases thus distinguished, viz., purpura and scurvy. But hæmorrhage into the substance of the cutis occurs, and not unfrequently in the course of all the acute specific diseases of low type, e.g., small-pox, typhus fever. If the hæmorrhagic spots be small we term them petechiæ, if large, vibices or ecchymoses. When small, the spots formed by articular hæmorrhage are usually circular; at the bend of the elbow, however, they are oval. When large, they are often very irregular in form.

Vesiculæ.—The third group is characterised by vesicles, i.e., by minute collections of serous fluid seated immediately under the cuticle. Although at first transparent, this fluid ordinarily becomes in a short time opalescent, milky, or even puriform. The cuticle covering is also at first quite transparent; after a while, however, it, like the fluid beneath, grows white and opaque. This change in the cuticle may precede that in the contents of the vesicle. Observe that the fluid of a vesicle is formed on the surface of the cutis, directly beneath the cuticle. The fluid from a vesicle may be absorbed, or it may dry up and form with the cuticle over it a thin scale; this scale may be detached, or it may remain attached and be thickened by fresh secretion beneath it.

If the vesicles be very small and numerous, and the fluid in them contains but little solid matter, then a mere furfuraceous desquamation follows the absorption of their contents, their bursting, or their desiccation; under these circumstances the vesicular nature of the disease may be overlooked, and the desquamation of the cuticle only noticed.

If the fluid contains a larger amount of solid matters, or if the scales first formed be thickened by the drying on them of fresh secretion, then flat scabs of a yellowish brown colour

are formed. These scabs are often raised at the circumference. They are well represented in this plate of Willan. Dry or moist honey-like scabs are never formed by the drying up of vesicles.

It has been said, that vesicles are formed at the orifice of sudoriferous ducts; but, although this may be true in some cases, all vesicles are not so constituted. The diseases or genera of the order Vesiculæ are—Eczema, Herpes, Sudamina, Miliaria, Varicella, Scabies.

Bullæ.—The diseases belonging to the fourth order of skin diseases are distinguished by the eruption of bullæ; that is to say, by collections of serosity of considerable size, situated directly beneath the cuticle, and raising the cuticle from the cutis. Bullæ differ from vesicles only in size; they vary in diameter from a quarter of an inch to two inches. Now and then the blebs, as they are called, attain the dimension of half a hen's egg. The fluid of bullæ, like that of vesicles, as well as the cuticle over them, may be transparent or opalescent. Bullæ may be followed by crusts or ulcerations. Pemphigus and rupia are the only two diseases belonging to this order.

Pustulæ.—The presence of pustules marks the fifth order. Pustules contain pus from the moment of their formation. The inflammation, on which the formation of pus depends, extends some depth into the cutis; so that the collection of pus which constitutes the pustule is situated in the cutis, and not merely on it immediately beneath the cuticle. When vesicles become opalescent, the opalescence depends on the presence of pus-corpuscles and molecular granules; but these vesicles, whether their contents be transparent or milky, are never sunk into the cutis.

Pustules are followed by thick and dry, or by honey-like crusts.

It is necessary that you should distinguish from each other three kinds of pustules—viz., Psudracia, Phlyzacia, and Achores.

You may forget these hard names, if you please; but remember the appearance of the pustules on this girl's head, for they are psudracia; this man's arms, for they are phlyzacia; and this child's face, for they are achores.

Psudraciæ are very little raised above the level of the cutis. They are often seated in the hair-follicles—a hair passing through the centre of each pustule. The redness around this variety of pustule is frequently very trifling, especially when they are placed at some distance from each other; when near together, however, the skin between may be red, hot, and swollen.

Phlyzacia are distinct pustules of some size, seated on elevated, inflamed bases. They are found especially on the trunk and extremities, and they terminate in small brown scabs.

Achores are very small pustules on comparatively large inflamed bases; base and collection of pus, however, form together only a small pustule. Achores are formed in considerable numbers in the vicinity of each other, the cutis between being red, hot, and swollen. They are more common on the faces of children than elsewhere. The secretion from them forms those very large, thick, irregular-shaped scabs, resembling dried honey in consistence, so common on the chins of children.

Impetigo, Ecthyma, Equinia, and Variola are the genera in the order Pustulæ.

Parasitici.—The diseases of the skin in which a vegetable parasite is developed are now arranged together, and constitute the group Parasitici.

The order Parasitici comprehends tinea tonsurans, tinea favosa, tinea decalvans, tinea sycosis, and chloasma.

Papulæ.—Papulæ are solid elevations of the cutis of small size, papilliform; their colour varies from dull white to bright red. When red, the colour may be removed for an instant by pressure, but the elevation remains. Papulæ are supposed by some to be enlarged papillæ, but the researches of Gustav Simon prove that papulæ may be formed at any point of the cutis by the infiltration of the cutis at that point by serosity.

Three genera belong to the order Papulæ, viz., Strophulus, Lichen, and Prurigo.

Squamæ.—The order Squamæ is characterized by the formation of an excessive quantity of epithelium scales loosely attached to each other and to the cutis. By the slightest friction dry opaque white scales are detached from the diseased surface.

Psoriasis and Pityriasis are the only two genera of the order Squamæ.

Tubercula.—Solid hard elevations of the cutis, much larger than papulæ are called tubercula. In this order are included several diseases, anatomically and pathologically considered, very different from each other; to this I shall advert at length in a subsequent lecture. The order Tuberculum includes molluscum, acne, lupus, elephantiasis, frambæsia, keloid, cancer.

Maculæ.—The diseases of the order Maculæ are characterized by the presence of too much or too little pigment in the parts of the skin affected, and, therefore, by white or dark coloured spots. They are lentigo, ephelis, vitiligo, and nigrities.

Xerodermata.—The order Xerodermata is characterised by roughness, dryness, and loss of elasticity of the skin, without desquamation of the cuticle, or any eruption. Ichthyosis and xeroderma (Wilson) are the diseases which constitute this order.

As each order of skin diseases is divided into genera, so each genus is divided into species. The species of some genera differ from each other most decidedly—both anatomically and pathologically. Some species, again, are anatomically almost identical, although, pathologically considered, they are very different; while others, although very different in aspect, are pathologically alike. The specific name usually indicates some striking peculiarity of the disease; in some cases a peculiarity in the constitutional state, as in *Rubeola maligna*, *Roseola variolosa*; in some, a peculiarity in the local symptoms, *e.g.*, *Rubeola sine catarrho*; in some, in the form of the eruption, *e.g.*, *Roseola annulata*, *Erythema circinnatum*; in others, in the time of the year at which they are supposed to prevail, *e.g.*, *Roseola æstiva*, *Roseola autumnalis*; in others, in the seat, *e.g.*, *Herpes labialis*, *Herpes preputialis*; in others, in the duration, *Pemphigus diutinus*; in others, in the number of the spots, *Pemphigus solitarius*; in others, in the colour of the eruption, *e.g.*, *Strophulus albidus*; in others, in the sensation of the patient, *e.g.*, *Prurigo formicans*.

Now I trust you have to-day at least learned practically to recognise an exanthem or red rash, petechiæ, vesicles, bullæ or blebs, three forms of pustules, papulæ, squamæ or scales, tubercles, and maculæ or stains, because the first thing you do when endeavouring to name a skin disease is to determine to which of the orders characterized by these lesions of structure it belongs. You ask yourself, Is this a pustular disease? is it a vesicular disease? is it a squamous disease? etc. If in doubt to which order any special case should be referred, always remember to scrutinise the margin of the diseased patch, as the characters of the primary disease are often well marked there when obscure from the presence of scabs, etc., at the centre; and do not forget, if your sight be not extraordinarily good, to follow my example, and examine the eruption with a magnifying glass of low power.

ORIGINAL COMMUNICATIONS.

OBSERVATIONS

ON THE

MEDICAL HISTORY OF THE EARLY KINGS OF ENGLAND.

By G. CHAPLIN CHILD, M.D.

MEDICAL SCIENCE AT THE TIME OF THE CONQUEST.

ANY one who takes the trouble to collate the various Chronicles and Histories of England can hardly fail to notice the discrepancy that exists respecting the Medical history of our early kings. It would be easy to mention many instances; but, as a single illustration, I may refer to Henry II., who is said by Hume to have died of a lingering fever; by others, from the effects of fright, after three days' illness. The cause of this disagreement appears to lie, sometimes in the paucity or vagueness of the details that have been transmitted to us by the old historians, and sometimes in carelessness or want of accuracy in translating the terms used by them. It has occurred to me, therefore, that a few leisure hours might be profitably spent in comparing together the chroniclers of those times, and noting what data they supply from which a

Medical man may now draw conclusions. I shall feel well rewarded if the results I am able to obtain help to harmonize the statements of historians, or impart any additional distinctness to our views of Medical science at that remote period.

The present essay relates to the time intervening between the Norman Conquest in 1066 and the year 1519, when the College of Physicians of London was established by Henry VIII.; a period of about 450 years. It reaches almost into the darkest epoch of the middle ages, and terminates at the Renaissance, when learning, art and science, after having revived on the Continent, were making their way slowly into England. The ancient Schools of Medicine may be said to have died out in Greece about the middle of the seventh century, but their doctrines had been preserved with veneration by the rising Arab nation, and were promulgated by it, like the Koran, wherever victory gave it a settlement. At the time of the Conquest, Medical science in Europe was almost entirely limited to the Moorish schools in Spain, and the school of Salerno in Italy. The science taught at both places was of the same second-hand kind; but the appliances for teaching—both professors and libraries—were much superior at the Spanish schools. Avicenna, the "Prince of Physicians," as he was called, had died just before the Conquest, but had left behind him his *Canons of Medicine*, a work which became a standard manual of the practice of Physic for several centuries afterwards. Thus Arab teaching, having absorbed and adopted the precepts of the Greek physicians, was followed everywhere.

The Medical department of the school of Salerno had been gradually built up, both by Europeans who had studied in the Arab schools, and by learned Arabians who had settled there as professors. With an origin stretching dimly into the 6th century, the schola salernitana culminated in the 12th; and long before the 14th century it was already in decay. Petrarck, wandering in Italy, thus records its dotage: "*Fama fuit fontem Medicinæ Salerni fuisse, sed nihil est quod non senio exarescat.*" This old age, indeed, with but little to recal its former reputation, has lingered on even into our own time, as I believe the schola did not finally expire until the year 1817. After all, the Salernian school, even at its zenith, was but a sickly transplant of Greek and Arab traditions, and neither added to scientific theory and observation like the Greeks, nor introduced valuable remedies like the Arabs. It dabbled largely in astrology and superstition; and even in its best days it invited St. Bernard, Bishop of Clairvaux, to repair there, and cure by his miracles those on whom drugs had been tried in vain. The chief merit of Salerno was that it first gave a European home to such Medical science as then existed. Moreover, its professors were diligent translators and compilers, and thus helped to hand over the ancient Medicine to the modern universities now about to spring up over Europe.

Early in the 12th century, when Salerno was most flourishing, the first of the Universities was founded at Bologna; and it was speedily followed by others elsewhere in Europe, among which the University of Paris soon obtained pre-eminence. Apparently they were at first established with no special view to the cultivation of Medical science, as none of the branches essential to Medical education appeared in the curriculum; law and theology were the strong points of attraction. Montpellier first took the lead as a Medical school; and many a Parisian in the 13th century, after studying in his own university, went there to give the finish to his acquirements. A double bar to medical progress existed at this early period: first, there was the blind servility to Greek and Arab authority; and, secondly, ignorance of anatomy and physiology. Up to the early part of the 14th century, all the anatomy that was known was copied from Galen, or derived from the inspection of the lower animals. But, in 1315, human anatomy was publicly, although sparingly demonstrated at Bologna by Mondini de Luzzi, who wrote a treatise which served as an anatomical guide for more than 200 years afterwards. Another and most serious bar to progress of every kind was the mode in which knowledge was sought by the Professors of the 13th, 14th, and 15th centuries. The patient spirit of sober observation was altogether wanting, and the aim of knowledge was perverted from the useful and practical to be concentrated upon the useless, the unreal and the incomprehensible. Speaking of the schooliasts, Macaulay observes, "These writers have so much acuteness and force of mind in arguing on their wretched data, that a

modern reader is perpetually at a loss to comprehend how such minds came by such data. Not a flaw in the superstructure of the theory which they are rearing escapes their vigilance. Yet they are blind to the obvious unsoundness of their foundation."

If we now turn to the state of Medical science in England about the time of the Conquest, and indeed for long afterwards, we find it at a still lower ebb. Of Medical Schools, properly so called, there were absolutely none, and no alternative remained for him who would rise to the level of science but to travel into Spain or Italy. The names of a very few Englishmen who did so travel for the sake of knowledge have been preserved; but with the many this plan was of course out of the question. The home-provision for teaching Medicine was uncertain and intermittent, consisting merely of what could be gleaned at the Abbey schools, if by chance the monks located there happened to have any medical knowledge to impart. These Abbey schools were the only fountains of learning in the country, and had gradually sprung up in imitation of those founded abroad by Charlemagne; they were the precursors of our universities and grammar schools, and are even yet not extinct. The pupils were almost exclusively youths destined for the priesthood, and the teaching was of course mainly adapted to that object; but sometimes it happened that the head master was Physician as well as ecclesiastic, as we read was the case at St. Albans and Abingdon, and he might, by travelling or otherwise, have obtained more or less insight into Greek and Arab science; and then, no doubt, some more regular medical instruction was given. But speaking generally, it would appear that at the time of the Conquest these schools were in a very ignorant state; and William was not slow to take advantage of this circumstance, and supersede the Saxon teachers by Frenchmen and Italians; less however with the view of promoting learning than of carrying out the policy of the Conquest. No native Medical literature then existed in England; foreign works had not been translated, and there were few who could have availed themselves of Greek or Arab writings, even if such works had been forthcoming. In fact, the taste for classical studies was repressed by an opinion, widely prevalent in those days, and faintly revived in our own, that heathen literature was but ill-suited to Christian readers. So little store was sometimes set on classical writings that, as Rotteck tells us, certain monks undertook the labour of erasing the comedies of Mæander from the parchment, for the sake of inscribing homilies in their place. Nevertheless, although the priesthood generally might be ignorant, that body contained within itself nearly all who were in any way distinguished for learning and science. To be a devout priest and a skilful Physician by no means exhausted their accomplishments. If a church was to be reared a priest drew the plans; the same architect could bridge a river or build a castle. Many, like St. Dunstan, were famous for works of art; others for their knowledge of war, so that a battle was seldom fought without a bishop among the generals. But, above all, they were the historians of the dark ages, not only chronicling faithfully the events of their own time at their respective monasteries, but helping also to preserve a knowledge of the past, by copying books of history wherever they could procure access to them. From these monkish chroniclers England has inherited a vast store of materials for illustrating a most interesting period of her history; and there can be no doubt that where the current of their narrative runs apart from superstition—a fault to be imputed to the age rather than to themselves—these historians are most trustworthy. Even their language, although inelegant when compared to ancient models or what has been written since the Renaissance, is expressive and sympathetic, and seems to harmonize with the period it describes.

Such were the teachers of our science at the time of the Conquest, and for centuries afterwards: let us try to realize what a Medical Practitioner was in those days.

Kings and other great men were usually attended by bishops, abbots, or other dignitaries of the church; but we shall suppose a patient of humbler rank in some country district has sent out to seek "the best advice." The Medical man is usually an ecclesiastic from a neighbouring monastery. Except in rare instances, it is not to be expected that this priest-physician has studied in Spain or Italy, or even that he is acquainted with foreign Medical literature; but he may, perchance, have been educated at a cathedral school,

where there were teachers possessing some knowledge of Galen or Avicenna. Most probably, however, he has not enjoyed this advantage, but has been selected by his brethren to uphold the medical reputation of their monastery on account of a natural aptitude and success in the treatment of disease, which have made him famous in the neighbourhood. Practice has familiarized him with the common diseases of the district, and has given him some acquaintance with the virtues of the plants growing there, as well as of a few drugs kept at the monastery, which, being imported from abroad, were only to be procured in large cities. Such were what we would now call the legitimate qualifications of a respectable Practitioner; but if haply these failed, he had a store of other resources upon which he could fall back; and we must recollect that, how absurd soever these may now appear to us in the 19th century, in the 11th they all lay more or less fairly within the Physician's province. In the first place, he took care to visit his patient on lucky days, and to avoid giving medicines on days that were unlucky. Then, perhaps, he could turn to account his knowledge of what were supposed to be the sympathies and antipathies of natural bodies. He might be a Uroscopist, predicting life or death by a glance at the urinal; or he might lean upon the "astrological system," which for centuries had been in respected vogue, and be able to draw useful hints from the influence of planets and their conjunction with other heavenly bodies. If his forte lay not among the stars, it was not unlikely he was armed with amulets, charms, or potent talismans.

As a last resource there were relics to invoke; wonder-working, cure-performing bones, and other fragments of holy men preserved in neighbouring shrines. But when all this array was used in vain, when the distemper instead of yielding gained strength, when fits or other direful symptoms supervened, the friends of the sick man, falling readily into the superstition of the age, were prone to see in the disease the malignant working of evil spirits; again the priest-physician was appealed to more earnestly than before. The church alone, by prayer or holy bell, could deal with these unseen and superhuman enemies. How vast this source of power at a time when belief in the visible agency of the devil was nearly universal, and when scarcely a cow could die unexpectedly in a farm-yard without raising the suspicion that evil spirits had been busy in bringing about the disaster!

The marks which characterized Medical science nearly throughout the whole period now under consideration, were absence of originality, blind obedience to Greek and Arab authority, empiricism, the alliance of medicine with theology, and lastly, its admixture with astrology and other superstitions.

In my next paper I shall proceed to give some account of the medical history of William the Conqueror.

NEW SUTURE FOR HARE-LIP.

By ALFRED J. WOOD, F.R.C.S.

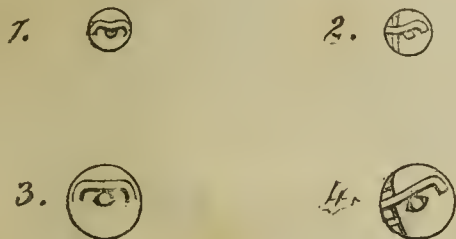
Surgeon to the Gloucester Infirmary.

In the *Medical Gazette*, Sept. 24, 1841, the Editor obliged me by inserting a communication on the treatment of a very bad case of double hare-lip by a new kind of ligature, which appeared to me an improvement on the hare-lip needles commonly in use. Since that time I have employed this ligature in all the cases under my care in which hare-lip needles and the twisted suture are generally applied, and the result has been uniformly successful. Experience has also enabled me to bring to a more perfect state the somewhat rude means which I at first adopted.

I cannot, from my own practice, speak as to the comparative value of the two modes of operating, having only once, as far as I can recollect, made use of a hare-lip or other needle as a permanent portion of a suture; but many years ago I witnessed several failures following the use of the needle and twisted suture, which induced me to consider whether any other appliance could be substituted.

In reflecting on the probable cause of failure in the cases to which I have alluded, it appeared to me that the rigidity of the needle, and the unavoidable compression of a portion of integument between it and the twisted suture, more especially at the point where the two are connected, produced a re-

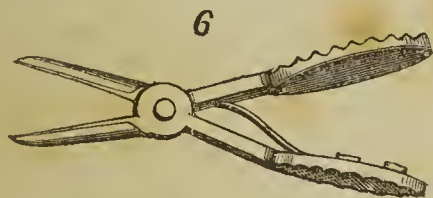
straint and a pressure beyond that which was required simply to keep the edges of the lip in apposition, and thus occasioned an unnecessary source of irritation, tending to inflame and ulcerate the parts so constricted and compressed; and, if the plan which I now submit be an improvement, I think this is mainly owing to the avoidance of these objectionable circumstances.



In place of the needle I employ a pair of silver discs. Each of these has a perforation in the centre. Across the back of one of them a portion of silver wire of suitable form is soldered, and is thus attached by its two ends, while the intervening portion lies over the perforation in the disc, leaving a free space on each side for the passage of threads. (Fig. 1.)

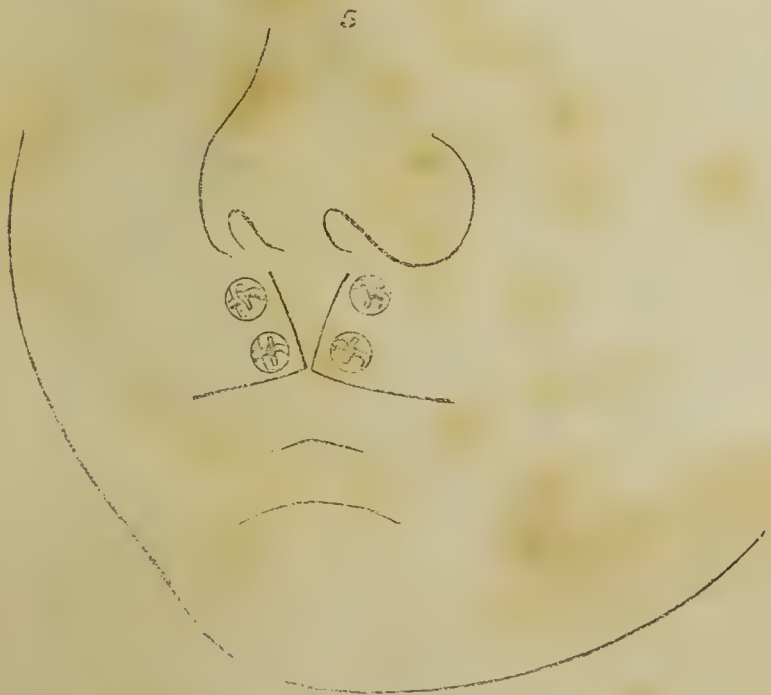
A similar piece of wire is attached by a hinge to the other disc, so as to admit of being opened and closed, or rather, to speak more correctly, of being raised and lowered on the back of the disc. (Fig. 2.)

The needle which I employ exactly resembles that sold in the shops as a darning-needle No. 4; and it is armed with a double ligature of soft silk, five or six inches in length. To carry this needle a small forceps, which I have had constructed for the purpose, will be found very useful.



Preparatory to the operation, the two free ends of the ligature (which has been previously threaded on the needle) are passed through the aperture in the disc (Fig. 1); so that one end may pass out on each side of the silver wire, over which they are then secured by a knot.

The opposite edges of the fissure being now pared as usual the needle is introduced as the hare-lip needle would be; but it is then drawn through, as well as the ligature, until the disc is brought up firmly against the lip.

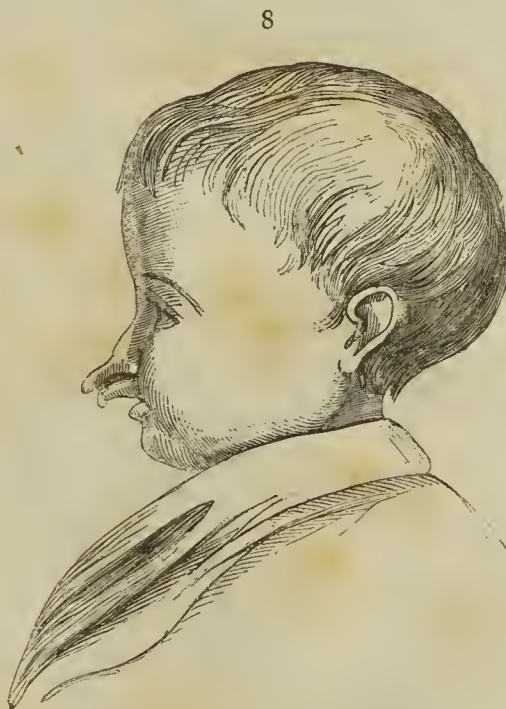


Disc, Fig. 2, the wire being opened upon its hinge, is now threaded upon the ligature, and the needle being cut away, the ends of the ligature are separated, and the hinged wire

closed down between them; and the pared edges of the fissure having been brought firmly into apposition, the second disc is slipped up close against the lip, and the threads of the ligature are tied over the silver wire. The ligature is then complete.



I conceive that this ligature affords an additional advantage over the needle and twisted suture, in facilitating the application and rendering more efficacious the operation of such auxiliary supports as it may be thought desirable to employ; and I believe that, in every case, it may beneficially supersede the twisted suture, than which it undoubtedly produces much less constriction and irritation of the parts included.



Also, in closing the edges of wounds made in the great operations, where ligatures seem desirable; and in cases where deep sutures are required, and where the quilled suture is customarily employed, as in the operation for the cure of lacerated perinæum, I think that the discs and double ligature may be used with advantage. For these purposes I have had discs constructed of larger diameter (Figs. 3 and 4), and adapted to the curved needle requisite for these proceedings.

Figures 8, 9, 11, and 12 represent the two worst cases of hare-lip which I have had an opportunity of treating, and Figures 10 and 13 the appearance of the cases after the wounds

The instruments may be obtained of Messrs. Philp, Whicker, and Blaise, either separately or in a case, which they have fitted up under my direction.

9



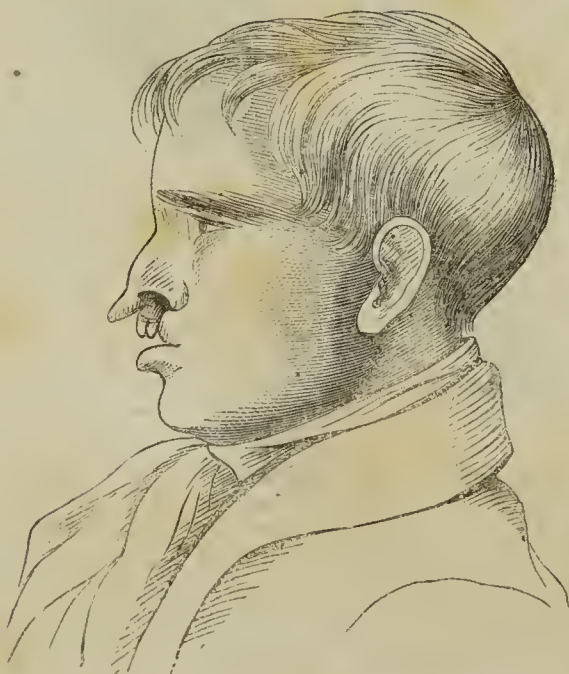
had healed, and before they left the Hospital. Figures 5 and 7 are imaginary representations of the discs *in situ*. Fig. 6

10



represents a pair of forceps with a grooved beak, which I have had made for the purpose of carrying the straight needle in the operation for hare-lip.

11



12



13



P.S.—A poor woman named Eliza Carrol, aged 53, called on me in the month of September last, on other business. Observing that she had marks of a double hare-lip, with numerous transverse cicatrices, I asked its history. In reply, she told me that she was operated on by Dr. Ferguson, in Edinburgh, when she was 7 years old, that the pins tore out, and the operation had to be twice repeated; that is to say, she was operated on three times altogether, and she had her face in bandages for six months.

December, 1856.

ON POISONING BY LABURNUM ROOT: WITH CASES.

By LEONARD W. SEDGWICK, Esq.

THE record of some recent cases of poisoning by laburnum seeds has led me to draw up, from notes taken at the time, a few remarks on two cases of poisoning by laburnum root, which came under my notice a few years ago. In one or two particulars they differ from the few reports of previous cases that I have seen; some recorded symptoms being absent, and some additional features superadded. I will first briefly narrate the facts.

About 4 p.m. on September 6, 1848, two healthy, robust children, a girl of 10 years and a boy of 8, accidentally met with a large laburnum-tree, which had just been dug up; mistaking it for liquorice, they both ate some portion of the root. The boy took a piece the size of a walnut. He felt quite well until about an hour and a quarter afterwards; he then vomited, and felt very weak; giddiness prevented him from walking, but he could sit upright. At 5½ p.m. I saw him. He was then quite prostrate, with a languid and very pale countenance, dull, lustreless eyes, and a cold skin. The pulse was slightly quickened, and very weak. The tongue was clean and moist, and not red. He felt giddy and faint, and he was vomiting occasionally a light brown fluid, in which floated some glutinous and stringy matters. There was no affection of the senses, no headache, no convulsions, no quickness of the respiration, and no pain in the abdomen. I gave him half-a-grain of tartar emetic in water, and this not producing vomiting, in five minutes the dose was repeated with the desired effect. The vomiting was kept up for half-an hour by copious draughts of warm tea, the ejected matters then appearing free from portions of the chewed root, the giddiness having left, but the pulse remaining very weak. I gave him some sal volatile. Very soon the pulse gained strength and volume, the surface became warm, the countenance resumed its vigour, and at 7 p.m. he was well.

The girl was much more severely affected; she had eaten at least three times as much as her brother. Soon after 5 p.m. she began to vomit, and great prostration of strength rapidly supervened. At 5½ p.m. the face was pale and deathlike, the eyes dull, and surrounded by a livid zone, and the skin very cold and clammy. There was great giddiness and considerable drowsiness, but no muscular jerkings or headache. The pulse was 95, very small and feeble. The abdomen was flaccid, and somewhat painful in the hypogastric region; the tongue was clean and moist, and there was occasional vomiting of the same sort of fluid as in the other case. No thirst and no affection of the respiratory function was noticed.

The first thing that it seemed desirable, and, indeed, essential to do was, thoroughly to clean out the stomach, and remove all trace of the poison, which was causing such intense depression. A quarter of a grain of tartar emetic in water immediately produced copious vomiting, which was continued by the frequent use of warm tea. At 6 p.m. the symptoms were not relieved, and the pulse was getting weaker; so I gave her some sal volatile, and five minutes afterwards some warm tea, which again produced vomiting, and the ejected fluid still contained pieces of laburnum root. The depression seemed yet advancing, the countenance was cadaverous and wan, the eyes often turned up under the upper lids, the pupils dilated, the surface very cold, the pulse very weak, and occasionally intermitting, and the abdomen tender on pressure. She was unwilling to be disturbed, and quite drowsy. At 6.10 p.m. the ammonia was repeated, and in ten minutes more, no improvement having taken place, vomiting was again induced by means of warm tea. At 6.35 p.m. she again took the ammonia, which was rejected in five or six minutes; and now the vomit contained much less of the chewed root. After this, the surface began to get warmer, and the pulse stronger. At 6.45 p.m. she took some coffee, which was soon vomited, but she was then in all respects improving. At 7.30 p.m. she took more ammonia. The countenance was now more placid, the surface warm, and the pulse stronger and regular. There was no giddiness and no vomiting. She rapidly recovered, and in the morning was quite well.

In regard to the treatment of these cases, I must observe that, with the exception of mustard, antimony was the only

emetic at hand. With the symptoms of depression of the nervous system so marked, the administration of sulphate of zinc would have been preferable; but, as matters were urgent, I thought it better not to wait, but to give one good dose of tartar emetic, which would be rejected before time had been allowed for much absorption, and to continue the emetic by copious draughts of warm tea, and thus thoroughly to wash out the stomach. Mustard I thought might add to the gastric irritation, and so render more likely the occurrence of gastritis. But I do not think that the antimony at all added to the symptoms of depression. In the first case, where the child was younger, but where a smaller quantity of laburnum root was taken, the symptoms were much relieved, immediately vomiting was produced, although two doses, of ½-a-grain each, of tartar emetic, were administered within five minutes. In the girl, who had eaten more of the poison, a quarter of a grain produced immediate vomiting; but the symptoms increased, until the stomach had been thoroughly cleansed of the laburnum, as shown by its absence from the vomit; then, and then only, did the pulse begin to gain strength. Sal volatile was given alternately with warm tea, in order that the debility might be relieved at the same time that the poison was removed.

The action of the laburnum root was in both cases remarkably depressant. The first symptom noticed was weakness of the limbs, in the girl soon amounting to complete inability to walk, or even to sit upright. Equally notable was the pallor and coldness of the skin, and the fluttering feeble pulse. Doubtless these symptoms, as well as the giddiness, arose primarily from a depressant action on the nervous system, and even the stupor and drowsiness may be assigned to the same cause. The dilated pupils, again, indicate an inactive brain. But while disorder of the cerebro-spinal and ganglionic systems was so evident, affection of the abdominal organs was much less than is noted in previous cases. Great epigastric pain and severe purging are spoken of as usual symptoms; here both were absent or nearly so. There was no purging, and the abdominal pain was only present in the girl, and in her case not to any great extent. In experiments on animals with infusion of laburnum bark, convulsions of a tetanic nature are said to be produced; and Dr. Taylor speaks of this substance as being "as energetic even as nux vomica;" but in my cases not even subsultus tendinum was noticed, and they bore not the slightest resemblance to poisoning by strychnia. Gastric irritation was present, direct or transmitted, as shown by the vomiting, but much more formidable was the depression of the nervous system, and most plainly did it depend on the presence of the laburnum root; appearing soon after its ingestion, remaining while it remained, and finally disappearing with it.

Boroughbridge.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

SERIES ILLUSTRATING THE CONNEXION

BETWEEN

BRONZED SKIN AND DISEASES OF THE SUPRA-RENAL CAPSULES.

(Continued from page 291, Vol. XXXIV.)

WE again take up the subject of diseases of the supra-renal capsules, and their connexion with bronzing of the skin. It is only by the further accumulation of accurate facts that the many yet undecided questions in reference to these affections, can be set at rest. The original and main proposition, that a bronzed change in colour of the skin is a symptom of a fatal cachexia, and of destructive disease of the supra-renal organs, may now be considered as fully established; but there are yet many questions as to apparent exceptions, as to the way in which diseases of these bodies influence the general health, the symptoms and treatment of the early stages &c., on which much more light may fairly be expected. Careful induction from a large number of cases is the only way in which these objects can be attained. We shall therefore continue to publish the details of all cases of this class which may be furnished to us, and shall feel obliged to any of our correspondents who may supply them. With the hope of making

our series include all the information extant on the subject, we shall also, from time to time, notice in abstract such cases as may appear in the Foreign or other Journals.

JONATHAN HUTCHINSON.

ST. BARTHOLOMEW'S HOSPITAL.

BRONZED SKIN WITH EMACIATION AND DEBILITY — DEATH — AUTOPSY — CRETACEOUS DEGENERATION OF BOTH SUPRA-RENAL BODIES.

(Under the care of Dr. BURROWS and Dr. BALY.)

John Littlechild, aged about 21, a shoemaker, residing with his brother at Enfield, died in St. Bartholomew's Hospital in September last. He had during the previous twelve months been several times, for short periods, under care in the same Hospital, and great attention had been attracted to his case as being in all probability one of diseased supra-renal capsules. The bronzing of his skin was most marked, and had been so for a full year before death, the tinge, however, having much deepened in intensity. It was a generally diffused olive brown tint, which existed in all parts but was darker in some than others. On the chest, where a blister had once been applied, it was very dark, but with this exception there was no appearance of patches. Under his axillæ it was very dark, and the penis, scrotum, &c., were nearly black. The sclerotics were clear and of pearly whiteness, contrasting remarkably with the hue of the surrounding integument. There were small stains in the linings of the cheeks, and a decided blackish tinge of the mucous membrane of the lower lip. The gums of the upper jaw were red and rather spongy. The eyes were blue, and his complexion had originally been fair. He was short of stature, and very thin. Although his features were not indicative of unusual mental hebetude, yet his manner was remarkably stupid and apathetic. He answered questions slowly and with great want of intelligence, as if it were a trouble to him either to think or to speak. He stated that his family were of fair complexion, and he had once been so; he knew that his skin had got brown, but how long the change had been noticeable he could not tell. He had never been either strong or stout, but latterly had lost much both in flesh and strength. He had been accustomed, when at home, to help his brother at shoemaking, but latterly had done very little; usually every day he had walked out more or less. He complained of having suffered from radiating pains round the loins. With regard to dyspeptic symptoms he stated that he frequently had nausea which often resulted in vomiting. His appetite was poor and variable, but he had not acquired any particular distastes. Beef he did not like, and could not digest, fat he had never liked. Was fond of sugar and sweets, and also of beer, but was never accustomed to take the latter except when in the Hospital. The bowels generally acted daily, and he slept well.

The above notes will give a fair idea of this lad's general state and symptoms. On each occasion of his admission into the hospital he was weaker and thinner than before, but on each of the two first occasions, with the rest and good diet then afforded, he gained strength somewhat. His failure was progressive though very gradual. On the last occasion it was evident, from his extreme languor of both mind and body, that he could not live long. Having been in for about three weeks he was obliged to confine himself to bed, and then his feebleness increased. During the last few days he was at times torpid and half comatose; at others, restless. The tongue was red and glazed, and the lips dry and chapped. He used to ramble at times, but had no convulsions. His urine was coagulable for several successive days before his death, but there were no dropsical symptoms.

At the autopsy the chief morbid condition, excepting that of the supra-renal capsules, was congestion of the liver. That organ was large, deeply coloured, and in every part turgid with blood. The kidneys were large, congested, and flabby, but not appreciably degenerate. In the lungs were two or three small collections of concrete tuberculous matter. Both supra-renal capsules were entirely destroyed, and not a trace of healthy structure could be found in either. Their proper tissue was replaced by cretaceous nodules, and concrete material in process of drying to become so, the different elements being bound together by dense fibrous tissue. They were somewhat larger than natural.

MICROSCOPIC APPEARANCES OF BRONZED SKIN.

The appended cut is from a drawing executed for the writer by Mr. Tuffen West. It shows a section of the skin of the patient in the above case. The layer of pigment-granules in the rete mucosum, and limited to that structure, is very distinct, and exactly resembles that of the Negro. The pigment is deposited, for the most part, in granules, but, in some instances, coloured cells are visible. It is believed that this is the first demonstration of the pigmentary nature of the change in colour in bronzing of the skin which has been made. The sketch was shown by the writer before the Pathological Society. The observation has been confirmed by a similar and simultaneous one by M. Robin, of Paris.



ST. THOMAS'S HOSPITAL.

TWO CASES IN WHICH THE SUPRA-RENAL CAPSULES WERE FOUND DISEASED AFTER DEATH, AND NO BRONZING OF THE SKIN HAD EXISTED.

(Under the care of Dr. PEACOCK.)

Case 1.—A girl, aged 18, was admitted on December 3, 1855. Her chief symptom was pain in the left thigh and leg, which subsequently increased, and was attended by much swelling. Her illness dated back about three months, and was commenced by severe pain in the right hypochondrium. She gradually emaciated and grew weaker, and death took place in April, 1856, about seven months from the beginning of her illness. Previous to death a large tumour, supposed to be of malignant nature, had been perceptible in her abdomen. No bronzing of the skin whatever had been noticed; on the contrary, she was remarkably pale.

At the *autopsy*, which was conducted by Dr. Bristowe, it was noticed that the skin was of remarkable pallor. Cancerous growths were found in most of the viscera of the trunk: both lungs, the liver, both kidneys, the bronchial, lumbar, and inguinal glands, the peritoneum and pleuræ being thus affected. There was also a mass of cancerous growth surrounding the left femur, where, during life, pain had been complained of. The supra-renal capsules were imbedded in a mass of cancer growing from the lumbar glands, and could not be distinguished. The words of Dr. Bristowe's report are, "Masses of cancer, which could scarcely be distinguished from the diseased glands around, occupied the positions in which the capsules should have been found; but they were connected, more or less, with the glands; and it was really impossible to say how much of these masses was formed of the diseased capsules. Those parts of the masses which were undoubtedly due to disease of the capsules appeared to the naked eye to present all the characters of encephaloid cancer,

and under the microscope presented the same elements as the malignant growths in the other organs of the body."

Case 2.—A man, aged 55, by trade a coppersmith, was admitted in June, 1856. He had only been off work for a month, but stated that he had been losing strength for five months past. His symptoms were those of anæmia, with cough and general debility. Suspecting copper poisoning, Dr. Peacock commenced the treatment by a course of iodide of potassium, which was followed by cod-liver oil and tonics. In spite of these he emaciated exceedingly, and had a troublesome cough, with expectoration. Vomiting was also a distressing and prominent complication, and he had occasional diarrhœa. Throughout his illness no peculiar browning of the skin was ever noticed, nor was any suspicion excited as to the existence of disease of the supra-renal capsules.

At the autopsy cancerous growths, of white appearance and soft and brain-like consistence, were found in several organs. One as large as a horse-bean, and another as large as a pea were found in the structure of the heart. Five or six, from the size of a pigeon's egg to that of a marble, existed in each lung, and in the upper part of the left lung was a mass the size of an orange. Several of the ribs were also infiltrated with cancer for two or three inches of their length. The supra-renal capsules were both of them enlarged and plump, their thickness being about three-quarters of an inch. They appeared to be wholly destroyed, their proper structure being replaced by a soft, white encephaloid deposit infiltrated into it. Under the microscope, the diseased capsules, as well as the cancerous tumours in the other organs, were found to be made up chiefly of nuclear bodies. (a)

Remarks.—It will be observed, that in each of these cases the supra-renal bodies were only involved in disease in common with many other viscera; and that their disorganization had probably been effected only a very short time before death. In one the whole duration of the patient's symptoms had been seven, and in the other eight months; and as, in all probability, these organs had not been the first to be invaded, and as a certain period must have elapsed between their invasion and their destruction, it may be held likely that the latter effect had been accomplished only a few weeks prior to death. Both were cases of acute and rapidly growing cancer. We have, then, as we remarked on a former occasion, a fair explanation of the non-occurrence of bronzing of skin. There had not been time for its production. All evidence seems to show that it is simply a consequence of the total disorganization of the supra-renal bodies, and from its nature as a pigimentary change it must be slow in production. In almost all the well-marked cases in which it occurred the symptoms had existed for from one to three years, and the original disease was of the organs in question. In illustration of this the preceding case may fairly be quoted.

THE PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

EXPECTED OPERATIONS.

THE YORK COUNTY HOSPITAL.

CASES AND COMMENTS.

(Cases under the care of Dr. SIMPSON, Mr. HEY, and Mr. HUSBAND.)

The following are brief notes respecting some of the more interesting cases now under treatment in the York County Hospital, and which were brought under our observation during a recent visit to it. (Dec. 25.)

EXCISION OF CANCER OF THE LIP, AND RECURRENCE IN THE LYMPHATICS.

In this case, a healthy countryman, aged 60, had an epithelial cancer, of small size, excised (Mr. Hey) from the left angle of the mouth on November 30, 1855. He was an out-patient, and the wound healed very quickly. He was quite well until September of the present year, when a gland under the jaw began to enlarge. This suppurated. He applied on December 25, for a second time, to Mr. Hey, there now being a small sinus leading into a mass of induration the size of a

chestnut, which adheres most firmly to the jaw. The induration is so great, and the connection with the bone so firm, that, were it not for the history, the present disease might easily be supposed to be periosteal. Mr. Hey regretted much that the man had not applied earlier, whilst the gland was movable, but expressed an opinion that excision of the disease, with the part of bone implicated, ought still to be attempted, and the man was accordingly admitted for that purpose. In this case, the scar in the lip remains quite healthy, and is indeed scarcely visible. With regard to this, we may note, that the practice of removing these growths very freely by means of the V shaped incision, which has of late years fallen into some disregard amongst London surgeons, is still, we believe, almost invariably followed in the Yorkshire Hospitals. We cannot but suspect that the superficial slicing off which is practised, when the disease is not extensive, in many cases of this kind, does not offer nearly the same guarantee against recurrence which the older method did. At Selby, our attention was drawn to two cases in which cancers of the lower lip had been excised, in one fourteen, and in the other, eleven years ago, both patients being still healthy old men, and without any indication of recurrence. Both were operated on in the Leeds Infirmary. Excepting always that known as the "chimney-sweep's," epithelial cancer of the lip is undoubtedly, of all the forms of true cancer, the least malignant, and the most susceptible of permanent cure by free excision.

LARGE ULCERATED GROWTH FROM THE SACRUM, SUPPOSED TO BE CONNECTED WITH A SPINA BIFIDA.

This case is, as far as our observation extends, of unique character. Its subject is a fairly healthy looking boy aged 10, from the neighbourhood of Whitby. Over his coccyx, and extending upwards to above the middle of the sacrum, is a large nodulated and ulcerated growth, the size of three fists. In the centre of this there is an irregular depression, around which rise nodulations the size of eggs, some of them yet covered by tense, thin, red integument, others ulcerated and sloughy. The base of the growth appears to be broad, and to connect itself with the bone. The perineum is healthy. Mr. Husband, under whose care the case is, was good enough to afford us an opportunity of examining per rectum, by which, however, only negative information was afforded. The gut appears perfectly healthy, and as far as the finger can reach no portion of the tumour can be felt. A few weeks ago some of the more prominent of the outgrowths were removed by the écraseur, but they are rapidly growing again. The boy is thin, but not of malignant cachexia. While under chloroform (on the occasion of the use of the écraseur) Mr. Husband examined the depressed centre of the ulcerated mass, and found that the finger passed deeply into a cavity which had bony walls apparently formed by the sacrum. The history, which is very obscure and uncertain, is that there was a tumour over the lower part of the spine from birth, and that it has been ulcerated several years at least. There is no paralysis of either leg, nor have there been any symptoms referable to affection of the spinal cord. Whether the case is one of a spina bifida unusually low down, the pedicle of which has become solid, and the walls of which have since ulcerated and fungated, or whether a solid congenital tumour of innocent nature has recently assumed a malignant character, it is difficult to say. The appearance of the whole and the large amount of new growth are strongly suggestive of malignancy in its present character, whatever may have been its original one. The case is well worth the attention of any who may have an opportunity of seeing it.

CONTRACTION OF THE MOUTH FROM BURN.

Mr. Husband has also under care a young man, aged 19, in whom, from the effects of a severe burn of the face when six months' old, the mouth has become all but closed. The contraction is quite symmetrical, and to such an extent that the opening is scarcely more than half-an-inch long, although by gaping it may be stretched to rather more than an inch. The lad states that, some years ago, the contraction ceased, and was quite arrested for several years; recently, however, it has again been progressive, and fissures have reopened at the oral angles. The deformity being exceedingly inconvenient, Mr. Husband proposes to operate, by establishing a sinus through the cheek, about an inch from one angle of the mouth, and, having allowed the lining of this to harden and become sound, to divide the intervening tissues. The cheek, near the mouth, consisting of little more than cicatrix, there

(a) The specimens both from this case and the preceding have been brought before the Pathological Society. (See our Report of its Meeting, December 2.)

would be no chance of success from any attempt to unite the skin and mucous membrane over the edge of an incision.

SUSPECTED MALIGNANT DISEASE IN THE ABDOMEN.

A case is under the care of Dr. Simpson, in which, from the passage of large quantities of pus by the urethra, and pain in the left loin, the diagnosis of renal abscess has been given. Mr. Hanbury, the House-Surgeon, also directed our attention to another case, under the care of the same Physician, respecting the real nature of which a post-mortem will, probably before long, give interesting evidence. It is that of an old man, who for several months past has been rapidly losing flesh and strength. He complains only of pain in the belly, and no tumour or swelling can be detected. The abdominal muscles are rigid, and resist pressure; and thus, notwithstanding his extreme emaciation, it is very possible that a tumour may be concealed. His countenance is wan and haggard. That there is no obstructive disease either of stomach or intestines is rendered positive by the absence of vomiting, and the fact, that the bowels respond to the influence of purgatives. That a malignant growth is pressing upon the thoracic duct is, perhaps, as plausible a conjecture as can be given to account for the existing inanition, under the circumstances referred to.

Amongst the cases which have been under care in this Hospital during the past year, the following are well worthy of notice:—

PARTIAL EXCISION OF THE ELBOW-JOINT—RECOVERY WITH A STIFF ARM.

A boy, aged 8, the subject of long-standing disease of the elbow-joint, was taken into the operating theatre, with the intention of having the whole articulation excised. On opening the joint, Mr. Husband found two small portions of necrosed bone loose within it, and also ascertained that the caries was limited to the external condyle of the humerus, from which part, in all probability, the loose fragments had been detached. A London Surgeon of some eminence, who chanced to be present, now suggested that, as the rest of the joint was healthy, the operation ought to consist in the removal of the affected condyle only. This was accordingly done. The result of the case has been that the child has recovered well, and the wound has closed, but the elbow is almost without motion. We may take occasion of this case to again raise a question which we have several times before done, and that is, Whether partial excisions of the elbow-joint are ever good surgery? To excise only the part which is diseased may look like conservatism, but is not the practice, if examined, based on false notions? Our own opinion is—and it is grounded on the observation of eight or nine cases of partial excision, and a comparison of them with others, in which the entire articulation was removed—that a double risk and loss is incurred by the practice. The ensuing constitutional disturbance is likely to be greater when the articular ends of several bones, covered with cartilage, and having their synovial reflexions attached, are left to suppurate in an opened joint, than when the whole are sawn away, and in the one case the best result will almost certainly be fibrous ankylosis and a stiff limb, while in the other a joint with good motions may be expected.

EXCISION OF THE TESTIS ON ACCOUNT OF ABSCESS IN ITS STRUCTURE, PROBABLY OF SYPHILITIC ORIGIN.

A man, aged 37, was admitted under Mr. Hey's care on account of great enlargement of the right testis, which had been progressively increasing for nearly a year. It was the size of a goose egg, and liable to aching, but not particularly tender. The scrotum was somewhat reddened and adhered to the gland. The cord was healthy. The man had had primary syphilis some time ago, but did not show any very marked indications of constitutional taint. The testis was removed, and was found to have been destroyed by a large collection of soft, curdy matter in its structure, the centre of which was almost purulent. In the structure surrounding this collection were two or three cysts of moderate size. The man recovered well; but about a month after dismissal was re-admitted on account of acute orchitis of the remaining gland, which, however, subsided under the usual treatment, though leaving some induration. It is not very often that syphilitic inflammation of the testis, which from the history and from the subsequent occurrence, the disease in this instance must, we suppose, be held to have been, goes on to destroy the gland so completely or to induce actual softening.

REMOVAL OF THE GREATER PART OF THE OS CALCIS AND CUBOID BONES ON ACCOUNT OF CARIOUS DISEASE—RECOVERY.

In February, 1856, Mr. Hey admitted a boy, aged 12, in tolerable health, the subject of old standing carious disease of the os calcis. There were large sinuses on the outer side of the heel and ankle, and much thickening of the soft parts. The ankle-joint, however, being sound, Mr. Hey preferred to attempt the removal of the diseased bone rather than to amputate. A free incision over its outer part having been made, the os calcis was exposed, and the greater part of it, in a softened state, was removed with the gouge. The case went on well, and the thickening having greatly subsided, the boy left the Hospital about two months afterwards. The wound had never quite healed, and about five months afterwards an increase of swelling having taken place, he was re-admitted, and a second gouging operation performed. On this occasion a considerable portion of the cuboid bone was removed. At the time of his last discharge, although the wound was not quite healed, yet there seemed every reason to expect that it would soon be so, and that a useful foot would be preserved.

At King's College Hospital on Saturday (to-day) Mr. Ferguson will perform two plastic operations, one for harelip and one the completion of a rhino plastic case. In these cases Dr. Snow will use the new substitute for chloroform. At St. Mary's, on Wednesday next, Mr. Baker Brown will operate by Dr. Bowman's method in a case of vesico-vaginal fistula.

NOTES AND QUERIES.

He that questioneth much shall learn much.—Bacon.

No 167.—CHLORATE OF POTASH IN THRUSH.

As some of your readers are doubtless aware, I have been lately engaged in endeavouring to ascertain the therapeutical uses of the Chlorate of Potass. There is one disease in which I should quite expect it to prove beneficial, but in which as yet I am not aware that it has been tried, and that is Thrush. My own practice being confined to surgery, cases of thrush hardly ever come under my notice, and I have no opportunities for trying it. If any of your correspondents are acquainted with any published reports on its effects in this disease, I shall be much obliged by being furnished with a reference to them. If not, perhaps some who are much engaged in children's practice would try it and report the results, either in your pages, or privately, to myself. The dose I would suggest would be about gr. iiii. ter die, to infants of two months, and increased according to age and severity of case. I am, &c. JONATHAN HUTCHINSON.

14, Finsbury Circus, December 31, 1856.

No. 168.—DRS. MOLLOY AND CONNOR.

I should feel much obliged if by means of your paper I could obtain this information:—

Did there exist within the first twenty years of the present century a Physician of some eminence named Molloy; or one named Connor?

Was a gentleman of either of those names a Physician to the Duke of York?

I have heard that there was such a person; that he had been in the army; and had been much concerned in mining operations at Monte Video, or somewhere in South America.

Has he any relations now living, or can you tell me anything about him?

I am, &c.

December 31, 1856.

No 169.—JAMES'S POWDER.

Can any of your readers inform me, as the result of actual experience, what are the different effects of James's Powder and the Pulvis Antimonii Compositus, as to the febrifuge or diaphoretic action of those compounds? In consequence of the large amount of inert material which they both contain in the form of phosphate of lime, their action must be equally uncertain; and yet the results of common observation tend to show that James's Powder is rather more to be relied upon than the other. As, in spite of the varying chemical proportions in these two powders, they are still extensively employed, it might be worth while to institute some comparative experiments on the lower animals to test their respective powers.

I am, &c.

A LONDON PHYSICIAN.

ANSWERS.

No. 158.—VACCINATING DOGS TO PREVENT DISTEMPER.

In your Number for December 13 is an interesting note, signed "T. S. W.," in which the writer states that he has just seen a huntsman vaccinating a litter of puppies in order to prevent the distemper, and been informed by the man that "he had done this for some years past, and that the success was quite complete, and that the practice was becoming general with huntsmen."

In the year 1817 I published, in the second volume of the "Annals of Medicine and Surgery," a communication on the same subject, and mentioned that: While dining a few days ago with my excellent friend, Mr. Honywood, of Marks-hall, Essex, many years a representative of the county of Kent, he asked me if I knew anything of the power of vaccination to render the distemper of dogs so mild as to be a very trifling disorder. I replied in the negative; but the various conversations and engagements of a large party prevented a continuation of the subject. The next morning I wrote a note to Mr. H. and received the following answer:—

"Charles-street, Berkeley-square.

"February 4, 1817.

"MY DEAR SIR,—I am just favoured with your note of this morning, and shall have great pleasure in making the following statement regarding hounds, which I have kept and bred for upwards of five-and-twenty years. Since I tried vaccination on them as puppies, about seven years ago, I have neither had canine madness, nor very little indeed of a most virulent distemper that used to carry off many of the puppies yearly. During this period of seven years, since I first thought of vaccinating the puppies, not a single hound has run mad; and in those that have had the distemper it has been much milder in its nature, and most of them escape entirely. All this I can vouch for under my own observation; and I think it would answer to vaccinate all puppies generally before they are weaned, as it does certainly strike me that canine madness, as well as those virulent distempers attached to dogs, is very materially affected by it.

"I remain, my dear Sir,

"Yours very faithfully,

"To Dr. Elliotson."

"WM. HONYWOOD.

Mr. Honywood was first informed of the power of vaccination to render the distemper a mild disease by his friend Mr. John Ward, a gentleman of Berkshire, well known in the sporting world, who has proved the fact by an experience of many years upon a large pack of hounds.

This circumstance is highly interesting, both practically and pathologically, and is not, I believe, generally known. Sir Joseph Banks told me it was new to him. I have found it unknown to all my sporting friends who are at present in town.

I am, etc.

Conduit-street, Dec. 27, 1856.

JOHN ELLIOTSON.

No. 166.—DR. JAMES SIMS.

The following account of Dr. Sims is taken from the 3rd volume of the roll of the Royal College of Physicians of London, a manuscript work in the library of the College, extracted from the Annals, and arranged by Dr. Munk:—

"Dr. Sims was a native of Ireland, the son of a Dissenting minister. He was educated at Leyden, where he took his degree of M.D. in 1764. Returning to Ireland, he settled at Tyrone, practised there for nine or ten years with distinguished reputation, and then removed to London. He was admitted a Licentiate of the College of Physicians, September 30, 1778. In 1810, after a successful career in town, whereby he had accumulated an easy competency, Dr. Sims removed to Bath, where he died, in the 80th year of his age. Dr. Sims was Physician to the General Dispensary, and was one of the founders of the London Medical Society, of which he was for many years president. His portrait was painted by S. Medley, and engraved by Branwhite. He was the author of 'Observations on Epidemic Diseases, with Remarks on Nervous and Malignant Diseases,' 8vo, London, 1773; 'A Discourse on the best Method of prosecuting Medical Inquiries,' 8vo, London, 1774."

I am, &c.

M.R.I.

Pall-mall, Dec. 29, 1856.

No. 166.

Your correspondent of last week in "Notes and Queries," No. 166, wishes to know some particulars respecting Dr. James Sims. Now, as he evidently has not looked into

"Maunder's Biographical Treasury," and probably does not possess it, I will, with your permission, give a verbatim copy from the above-mentioned work. I am, etc.

Regent's-park, Dec. 29, 1856.

H. L. MAYSMOR.

"Sims, Dr. James, an eminent Physician and Botanist, was born at Canterbury; studied Medicine at Edinburgh; removed to Leyden, where he took the degree of M.D. in 1764; and he afterwards settled in London. He became Physician to the Surrey Dispensary, and also to the Charity for Lying-in Women; devoting much of his time to, and gaining great reputation by, obstetric practice. His chief works are, 'Observations on Epidemic Disorders;' 'On the best Method of prosecuting Medical Inquiries;' and the 'Principles and Practice of Midwifery.' He was also the editor of the *Botanical Magazine*, from Vol. XIV. to XLII., and contributed to the 'Transactions of the Linnean Society,' of which he was a member. Died 1831."

The following Courses of Lectures will appear in the *Medical Times and Gazette* for 1857:—

ON ANÆSTHESIA IN MIDWIFERY,

By J. Y. SIMPSON, M.D., F.R.S.E., Etc.

Professor of Midwifery in the University of Edinburgh.

A continuation of the Course of

CLINICAL LECTURES ON FEVER,

By WILLIAM STOKES, M.D., M.R.I.A.

Regius Professor of Physic in the University of Dublin.

The LUMLEIAN LECTURES, delivered at the College of Physicians,

ON THE DISEASES OF THE OVARIA AND UTERUS,

By ROBERT LEE, M.D., F.R.S.,

Physician Accoucheur to St. George's Hospital.

A Course of Clinical Lectures

ON THE DISEASES OF THE SKIN,

By WILLIAM JENNER, M.D., F.R.C.P.,

Physician to University College Hospital, and to the Hospital for Sick Children.

LECTURES ON INJURIES OF THE HEAD,

Delivered at the Royal College of Surgeons,

By PRESCOTT HEWETT,

Professor of Anatomy and Surgery at the College.

A continuation of the Course of Lectures on

GENERAL NATURAL HISTORY,

By THOMAS H. HUXLEY, F.R.S.,

Lecturer on General Natural History at the Government School of Mines, and Fullerian Professor of Physiology, Royal Institution.

A continuation of a Course of Lectures

ON DISEASES OF THE EAR,

By JOSEPH TOYNBEE, F.R.S.

Aural Surgeon to St. Mary's Hospital, Lecturer on Aural Surgery at St. Mary's Hospital Medical School, and Consulting Aural Surgeon to the Asylum for the Deaf and Dumb.

The conclusion of the Course of Orthopædic Surgery, by four Lectures on the

PATHOLOGY AND TREATMENT OF LATERAL CURVATURE OF THE SPINE,

By WILLIAM ADAMS, F.R.C.S.,

Lecturer on Surgery at the Grosvenor-place School.

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Medical Times & Gazette.

SATURDAY, JANUARY 3.

OUR HOSPITAL APPOINTMENTS.

It is extremely probable that this will be the first intimation very many of our readers will receive of the fact that Mr. Charles Guthrie has resigned his appointment as surgeon to the Westminster Hospital, and that the election of a Surgeon and Assistant-Surgeon to that important Institution is to take place on the 17th of this month. Mr. Hothouse succeeds, as a matter of course, to the surgeoncy, and it is understood that, with almost equal certainty, Mr. Power will be appointed Assistant-Surgeon without opposition. All this seems to have been settled before the vacancy was made known at the Hospital. It is not known even now to the Medical public.

In no public office in our country is it more important that the right man should be in the right place—the best man in the best place—than it is in the appointments of Physicians and Surgeons to our Hospitals. Inefficiency in the man holding such an appointment has not only a prejudicial effect upon the reputation of the Hospital to which he belongs, but it is a fearful wrong to the poor patients entrusted to his care, and to the interests of Medical science and education.

The importance of securing the very best advice for the poor of the labouring classes at our Hospitals, is, perhaps, not sufficiently estimated. If the Duke of Broadlands find his eyesight failing, his usual Medical attendant calls in one or two of the most distinguished Surgeons of the day in consultation. His case is thoroughly and leisurely entered into, and the utmost skill and experience are brought to bear upon it. If John Smith, Shoemaker, of Long-alley, begin to suffer in the same way, he waits as long as he possibly can, and then, loth to interrupt his morning's work, presents himself at one of our Hospitals. He is there among from two to three hundred others who have to be seen by the Assistant-Surgeons on duty in from an hour and a half to two hours; a minute and a half is about the measure of time his ease will be under consideration. If the Duke should unfortunately lose his sight, he will still enjoy all that an abundance of this world's good can procure him; he will have the resources of an educated mind on which to fall back; and be cheered by all that friendship can afford. If John Smith become blind, we may well tremble to think what the world will be thenceforth to him. From being the support of his family, he is transformed at once into its most heavy incumbrance; himself powerless in his wretchedness, and his children destitute around him. Such is but a feeble expression of his lot. The measure of his misery is the measure of

the responsibility of each individual who helps to put an incapable man into an important post. It must be apparent to all, that the Hospital Surgeon who sees his patients with such rapidity must of necessity require far more ready knowledge and experience than he who prescribes in private and with deliberation.

A still more weighty consideration remains, upon which we need not enlarge. Our Hospitals are Medical schools; they are fields of observation for the rising generation of the Profession. Their Physicians and Surgeons are teachers, and upon their teaching, for good or evil, depends the destiny of thousands. The effects of the dissemination of error are incalculable, but are so evident on reflection that it is merely necessary to suggest the subject and pass on to the question, In what manner should these important appointments be filled up?

In a late Article on Hospital Electioneering, in our last volume (page 595), we exposed some of the evils which result from the practice of electing the Medical officers of our Hospitals by the whole body of Governors, and advocated the principle of placing the elective power in the hands of the Managing Committee, assisted by the existing Medical officers. Dr. Radford, of Manchester, very ably supported this view in a letter published in the following number, and made known the excellent rules adopted at St. Mary's Hospital, Manchester. We have since heard that the system we recommend is followed at the Southern Hospital, Liverpool, and we trust the day is not far distant when the change will be universal. But we must at the same time adopt some measure to prevent the abuses to which the reformed system is liable. We stated our opinion that it was not perfect; that favouritism, family influence, and clique would still exert their power, though not to so great an extent among a small body of well-selected gentlemen as among a large body of Governors whose only qualification is their annual subscription.

It appears, however, that even among small bodies of gentlemen, and among Medical Officers, favouritism does have such influence that some safeguard must be devised. Not very long since there was a vacancy for an Assistant-Surgeon in one of our largest Metropolitan Hospitals. A gentleman of some professional position and very considerable experience heard that the field would be open to all competitors. Though naturally astonished at this, he called upon the Treasurer, stated what he had heard, and asked to be told frankly, to avoid the trouble, annoyance, and expense of an unsuccessful canvass, whether any one, with even considerable Professional claims, had any chance of obtaining the Assistant-Surgeoncy if he had not been educated at this Hospital? The answer was just what any one would anticipate who knows how these things are managed in London. "Sir," said the Treasurer, "he would not have the shadow of a chance. It would be disgraceful to us not to be able to educate our own Students for these inferior posts." It was useless to argue that the inferior post is a most important one; that thousands of patients pass every year through the out-patients' room; that Students should learn there many of their most important practical lessons; and that the holder of the inferior post would some day go up higher. "Practice makes perfect. By the time the Senior goes the Junior is fit to take his place." Very possibly. But if a dunce learns so much, to say nothing of the mischief he does while learning, what discoveries would not the able man make? The one may avoid gross blunders, and satisfy the Treasurer and Governors, the other would advance the science and benefit medicine and humanity.

But how are we to avoid the influence of favouritism if we exclude the voice of the general body of Governors? We

reply, By the influence of the public opinion of the Profession—by complete publicity—by a determination among our Hospital Committees to take the best man they can find, no matter where he was educated. Every vacancy should be made thoroughly known. Candidates should be advertised for. Full time should be given them to hear of the vacancy and to bring forward proofs of their competency. Their merits should then be most carefully weighed, and a fair and honest decision given. In this way alone can those who fill up our Hospital appointments perform the responsible duty in a way which can satisfy their own conscience, promote the welfare of the sick, and advance the interests of Medical Science.

THE WEEK.

WE announced last week the death of Dr. Paris, the late President of the Royal College of Physicians, and stated that we should give some account of his life and writings in a future number. We have now the satisfaction of adding that a very full and accurate biographical notice of Dr. Paris will appear in our columns next week, from the pen of an old and intimate friend of Dr. Paris, Dr. Munk; so that our readers may depend on a more satisfactory account of the late President than has yet appeared, numerous inaccuracies having been admitted into the daily papers.

Who is to be President of the College of Physicians? According to the existing Charter of the College, the President must be elected *from* and *by* the Elects. The Elects elect each other, and they elect the President. The present Elects are Drs. Thomas Turner, Clement Hue, John Bright, Thomas Mayo, Henry Herbert Southey, Francis Hawkins, and James Alderson. These gentlemen have to elect the President from among themselves. Of course, it is impossible to say upon whom their choice will fall, but the general opinion seems to be, that it will be upon Dr. Alderson, a most estimable, accomplished, and popular man; and we may add, that this choice would be received with very general satisfaction by the great body of Fellows. The vacancy among the Elects, created by the elevation of one of them to the Presidency, will probably be filled up by the election of one of the next eligible Senior Fellows, Drs. Roget, Roots, or Babington. Among the Senior Fellows, who are not eligible for the Presidency because they have not become Elects, we may name Drs. Latham, Watson, Bright, and Sir Henry Holland. It is quite unnecessary to point out the evils in the present mode of election, as we have done so repeatedly when advocating the grant of a new Charter to the College.

A deplorable case of poisoning has occurred this week, owing, it is said, to a mistake made in a chemist's shop; but as the inquiry is still proceeding, we refrain from doing more than making a passing allusion to the subject. From what has at present transpired, it would appear that the deceased swallowed a large dose of prussic acid, accidentally or incautiously mixed with some castor-oil. Another case of poisoning has occurred, in which a mother has administered laudanum to her own offspring; and it is to be observed with regret that the woman seems to have experienced no difficulty in procuring the deadly drug. The necessity of a strict supervision over the practice of pharmacy becomes every day more apparent.

We publish this day the first of a Course of Lectures on Diseases of the Skin, by Dr. Jenner. It is quite unnecessary to allude to the importance to practical men of such a course by such a teacher; but we may be allowed to mention one circumstance which will give them additional value. They will be illustrated by coloured engravings, our enterprising

publisher having succeeded, at great trouble and expense, in obtaining engravings printed in colours by a new process, copied from original drawings, made under the immediate superintendence of Dr. Jenner. This is the first attempt made to introduce the practice of colour-printing in the illustration of a Medical work; we trust it will be received by our readers as an assurance that no effort will be spared to render the *Medical Times and Gazette* worthy of their continued support.

A paper has been issued by the Council of the Royal Medical Benevolent College, showing that a Committee has been appointed to ascertain the amount to be charged to the exhibitors of the school. According to the Report of that Committee, it appears that the actual present annual cost of each exhibitor amounts to £38 16s. 2d., not including any expenses for repairs of fabric, or painting, or keeping up the grounds, or other causes of incidental expenditure. A financial statement accompanies the Report, and each item is duly set forth. We must remark that the sums charged for the maintenance of the school appear to be perfectly reasonable; and unless it can be shown that any of the items may be reduced, the annual charge of £40 is not excessive. It will be seen, from a letter addressed to Mr. Probert, and published in another part of this Journal, that the opposition to the increased rate of payment for the exhibitors is not universal, and that some of the friends of the College, at least, are satisfied with the new arrangements. We observe that the annual cost for board for each person in the scholastic department is set down at the moderate sum of £13 4s. 3d., and this sum might, we presume, be still further reduced when the price of provisions is lowered from its present high rate.

The week has been a busy one for the publishers of medical serials and periodicals. The London and Provincial Medical Directory for 1857 has appeared with additions, making it more useful than ever. It is now very complete, and we know that such pains have been taken to ensure correctness that any inaccuracy must depend upon gentlemen who neglect to return their annual circular. Messrs. Smith's Visiting List for 1857 has just been sent to us. This pocket-book is so well known that we need only say it is fully as well got up as in former years. Braithwaite's Retrospect, and the Abstract of Ranking and Radcliffe, for the half year just expired, have also been issued this week. The relative merits of the two works are much the same as in former volumes. We have to welcome the appearance of the first number of a new half-yearly periodical, the Liverpool Medico-Chirurgical Journal. So far as can be judged from the highly interesting contents of the number before us, the practitioners of Liverpool are making excellent use of the field of observation they enjoy. Their Journal bids fair to be most creditable to them. The January number of the British and Foreign Medico-Chirurgical Review fully sustains the very high reputation this quarterly has so long maintained. The articles on Glycogenesis, the Local Causes of Cholera, and Entozoa in the Human Subject, are especially noteworthy. The first number of the Psychological Journal for the New Year contains an article by Dr. Forbes Winslow, on Prolonged Shower Baths in the Treatment of the Insane, well worthy of attention; and some very important observations by Dr. Webster, on Belgium Lunatic Asylums. Among the other contents of the number, a reprint of an American article, On the Insanity of George the Third, will interest both the medical and general reader.

Our system of treating convicts is not perfect, but it may be held up in favourable contrast with the result of French

transportation to Cayenne. A correspondent of the *Times* says, "It is notorious that at Cayenne, in the course of the present year, the deaths were 56 per cent.; 32 per cent. of the convicts died of the yellow fever, which became endemic in Guiana, and 24 per cent. died of swamp fever and consecutive asthma. It has been ascertained that in the Comté—that is to say, inland—the average life of the convicts was 32 months and some days." Transportation, then, is not one of the things they "manage better in France."

The conference between the representatives of the Colleges of Surgeons and Physicians of London, and the Medical Reform Committee of the British Medical Association, which took place last week, is a step in advance towards the success of the New Medical Reform Bill, as a common agreement was arrived at between the conferring parties on the difficult point of the representative constitution of the Council. No fresh arrangement was entered into, but distinct propositions are to be submitted by the Association Committee to the representatives of the Colleges. In the meantime, both parties seem to be agreed to accept a certain number of members of Council to be nominated by Government, as a sort of counterpoise to the nominees of the Corporations and Universities.

The new Drainage Commission has been constituted in a manner which is calculated to satisfy the public. Mr. Stephenson and Sir W. Cubitt have been set aside, as they had pledged themselves to Mr. Bazalgette's plans. Some hundred and fifty civil engineers who had sent in plans of their own were also set aside. But a military engineer of high reputation, Captain Galton; Mr. Simpson, the engineer of the Chelsea Waterworks, who is now superintending the drainage of Stockholm; and Mr. Blackwell, of Clifton, well known as an engineer of canals and railways, and for his drainage works at Gloucester, constitute the engineering element. As these gentlemen will act in correspondence with the Commission on Sewage Deodorization, and their own powers are very extensive, we may hope to see the very important question of Metropolitan Drainage settled satisfactorily. The Utilization Commission is composed of Lord Portman, Mr. Ker Seymour, Mr. Brunel, Mr. Rawlinson, Professor Way, the agricultural chemist, Mr. Lawes, a manufacturing chemist, and Dr. Southwood Smith.

REVIEWS.

Pathological Chemistry, in its application to the Practice of Medicine. Translated from the French of MM. Becquerel and Rodier, by STANHOPE TEMPLEMAN SPEER, M.D. Pp. 566. London, 1856.

THE application of chemistry and the microscope to the pursuits of practical medicine is one of the great triumphs of the age in which we live; and there can be no doubt, that as science advances, many problems in Pathology, now obscure, may be completely solved. The difficulties attendant upon the chemical examination of the solids and fluids of the body in health and disease are of no ordinary nature, and they require, on the part of those who grapple with them, the most profound knowledge and experience in analysis; while in drawing conclusions for guidance in practice, there is demanded, in addition to accurate chemical science, a critical acquaintance with the phenomena of disease and of the various modes adopted for its cure or alleviation. The work of MM. Becquerel and Rodier fulfils the requirement indicated for so mighty a task; and while their researches exhibit, as might be expected, the most elaborate investigations of modern chemistry applied to pathology, the rules for treatment evince the tact and experience of practised and accomplished Physicians. In the latter particular we might assert with some truth that the labours of MM. Becquerel and Rodier would prove even

more serviceable in France than in England; for while our continental brethren rely, as it appears to us somewhat unreasonably, upon such stereotyped modes of practice as repeated bleedings, the expectant method, &c., we, in this country, have long adopted a more rational system, founded upon a consideration of the essential nature of disease; and indeed most of the rules of treatment which are laid down in the present work have generally been employed by British Physicians. Thus, for instance, in treating of the practical consequences to be drawn from the modifications of the blood in typhoid fever, MM. Becquerel and Rodier offer the following advice, which, however sound, will probably to English ears appear somewhat superfluous.

"In the first place, then, our knowledge of the composition of the blood in this disease must tend to exclude the employment of bloodletting in the majority of cases, unless complicated with one or other of the phlegmasiæ. How indeed can it be otherwise? We have previously shown that venæsection impoverishes the blood in proportion to its repetition; while in typhoid fever this fluid has of itself a similar tendency, which is but too well marked. It should, moreover, be remembered, that typhoid fever is a long and severe malady, for which it is necessary to preserve the patient's strength as much as possible, in order to enable him not merely to struggle through the disease, with its category of chances, but likewise to sustain the protracted convalescence which usually occurs in these cases. Profuse bloodletting cannot but be injurious under such circumstances. Lastly, in ordinary convalescence from typhoid fever of moderate severity, the blood is much impoverished, and the patient not unfrequently presents a marked anæmic condition, which lasts for a considerable time, and is often somewhat difficult to remove. Bloodletting, therefore, practised during the disease, does but tend to increase that which is of itself produced during convalescence,—viz., anæmia."—P. 121.

The subjects are treated in six chapters, the first of which describes the fluids which contribute to the formation of the blood, viz., the Lymph and the Chyle; the second treats of the Blood itself; the third, of the secretions formed by the conglomerate glands, viz., the saliva, the pancreatic juice, the urine, the spermatic fluid, the milk, and the lachrymal secretions; the fourth, of the secreted products of membranes in general, and of the changes to which these products are liable; the fifth, of the changes occurring in the solid portions of the organism, and the sixth, of the organic products of new formations, viz.; pus, tubercle, and cancer.

The second chapter, which treats of the Blood, is the longest and most complete, and we cannot give a better idea of the manner in which the subject is treated than in the words of the authors themselves, as expressed in their Preface.

"In the composition of this chapter we have adopted the following method of procedure, from which we have never deviated, when examining a fluid, a healthy tissue, or a pathological formation. We begin, then, by stating the plan upon which the analysis of the blood is to be conducted. We then enumerate the different immediate principles which it contains, and then proceed to their individual consideration, stating, at the same time, the modifications which each may undergo, whether in health or in disease. We then consider, synthetically, the composition of the blood in health, and the variations which are compatible with this condition. We then pass on to the pathological changes of which it is susceptible. These we trace, not only in the chief classes of disease, but likewise in each affection specially considered, and we conclude by a statement of the practical consequences to which a knowledge of these modifications of the blood may lead."

It is utterly impossible, with the space at our disposal, to follow the authors through the elaborate series of researches which they have instituted upon the blood in various conditions of the body in health and disease, and we must content ourselves with noting here and there some of the general conclusions at which they have arrived as to the state of this fluid in certain morbid affections. The following remarks, although they might, perhaps, be anticipated by *a priori* reasoning, are valuable as being the results of chemical investigation upon the modifications of the blood in the pyrexia:—

"1. In many of the pyrexia the composition of the blood differs but little from that of health; when the disease, however, is somewhat prolonged, the globules and the albumen undergo a slight decrease.

"2. In a certain number of the pyrexia, and especially

typhoid fever, when prolonged, and of a dynamic type, the fibrin is found to be considerably diminished in quantity, and, as a consequence, the blood becomes more fluid and less coagulable. O. 9 represents the smallest proportion of fibrin that we have yet met with under these circumstances.

"3. In a certain number of fevers—occasionally in the typhoid, but more generally in the eruptive fevers—the disease presents an hæmorrhagic character from its very commencement. This is due to the decrease of the fibrin. In such cases the fluidity and diminished coagulability of the blood are likewise marked characteristics."—P. 117.

The authors then give in detail the analyses of the blood in typhoid fever, typhus fever, small-pox, measles, scarlatina, intermittent fever, and ephemeral fever, and they arrive at the following result:—

"The practical consequence deducible from the above analyses is simply this: that the composition of the blood being identical with that of health, or nearly so, there can be no necessity for bloodletting. Those who would employ it under such circumstances, must base their practice upon a totally different mode of reasoning."—P. 127.

We doubt whether, in English practice, the materials for such analyses or such conclusions could have anywhere been afforded, more especially when we find it recorded among the investigations of MM. Andral and Gavarret upon the state of the Blood in Small-pox, that certain patients were submitted to bloodletting no less than four times in the course of this disease! We may remark, *en passant*, that the globules diminished remarkably in proportion to the number of the bleedings, as they amounted, in one case, in the first bleeding, to 120·6; in the second bleeding, to 110·2; in the third, to 94·6; and in the fourth, to 87·0.

The composition of the blood in cholera has been carefully examined by MM. Becquerel and Rodier, and although we cannot quote the analyses themselves, the following are the results at which the authors have arrived; and it will be observed that they do not differ from the views generally entertained of the pathology of this mysterious disease:—

"In presence of such results, and more especially when placed in juxtaposition with the analyses of the stools and vomited matter of cholera, of which we shall speak hereafter, it is possible, in a certain degree, to explain the phenomena of this disease. In fact, a portion of the solid matters of the serum, more especially the albumen, is exhaled by the mucous membranes. The blood becomes less fluid, and the stools more watery. The consequence of this escape of water is a concentration of the globules, extractive matters, chloride of sodium, etc. The decrease of the albumen of the serum being [is?] explained by its presence in the intestinal secretions. As for the increased proportion of fatty matters, may it not be attributed to the extremely rapid absorption of adipose matter which takes place in cholera?"—P. 130.

To this account of the composition of the blood in cholera, we add, from other portions of the work, the following description of the matters vomited, and of the alvine excretions, in the same disease. First, of the vomited matters:—

"The analysis of the matters vomited in six cases of cholera enables us to regard this morbid fluid as constituted by the serum of the blood, diluted with, in general, a large amount of water containing coagulated albumen, and holding in solution, moreover, a large proportion, relatively speaking, of chloride of sodium."—P. 447.

The following are the results obtained by the analysis of the alvine discharges:—

"The conclusions at which we have arrived, respecting the alvine evacuations of cholera, are similar to those already adopted with regard to the vomiting in this disease, with the exception of the alkalinity of the former, due to a very small proportion of ammoniacal salts. The alvine evacuation of cholera is, in fact, nothing more than water containing a small quantity of albumen and a large amount of chloride of sodium, while fragments of coagulated albumen may be seen floating about in it."—P. 458.

As we have quoted the opinions of MM. Becquerel and Rodier against bloodletting in certain phlegmasiæ, we introduce the following arguments, which appear to us equally sound, in favour of that practice in cases of cerebral hæmorrhage:—

"In persons who are the subjects of cerebral hæmorrhage, it is evident, from the facts which we have just considered, that there exists a twofold modification of the blood, usually

occurring simultaneously. The first of these consists in an augmentation of the whole mass of the blood, viz., plethora. The second, in an increase of the globules, which is often very considerable. Now, a knowledge of these facts is not a matter of indifference; it justifies the use of bloodletting in this disease, inasmuch as general bloodletting has precisely the effect of modifying these two conditions of the blood—*i.e.*, of diminishing the mass of circulating fluid and the proportion of globules. It is scarcely possible, therefore, to believe that two such modifications of the blood, either preceding or accompanying cerebral hæmorrhage, should not exercise some influence upon its production. This remark is especially needful, inasmuch as many practitioners regard bloodletting as utterly useless in cerebral hæmorrhage, and for two reasons: first, because, say they, the blood has undergone no change; and secondly, because the hæmorrhage having once taken place, no subsequent bloodletting can remove the effused fluid. To these objections, the above analysis constitutes a ready response. In truth, the blood *has* undergone a change, the proportion of globules being considerably increased. This being the case, bloodletting is distinctly indicated. Such is our answer to the first objection. As for the second, it is true that, hæmorrhage having once occurred, bloodletting will not cause the removal of the effused fluid; but it may prevent a consecutive increase of the sanguineous effusion—an event by no means of rare occurrence. Lastly, these analyses enable us to answer a third objection made by those who, believing that there exists, previous to the hæmorrhage, a diminution in the proportion of fibrin, which facilitates the exudation of blood into the cerebral substance, regard bloodletting as tending still further to reduce the fibrin, and thus to favour the tendency to sanguineous effusion. Such a view is, however, no longer tenable; for, so far from a decrease of the fibrin being the cause of cerebral hæmorrhage, and constituting a bar to the employment of bleeding in this affection, the analyses quoted above indicate an increase rather than a decrease of the fibrin."—P. 145.

We remark with some surprise that no information is given as to the condition of the blood in gout.

In treating of the pathological chemistry of the bile, the researches of M. Claude Bernard upon the sugar-secreting function of the liver are fully detailed; but, as the authors have added nothing to the facts ascertained by that physician, it is unnecessary to recapitulate them. The following remarks, however, upon the treatment of diabetes are important:—

"There are two plans of treatment which have been more successful than all others, albeit they frequently fail. The first consists in the complete suppression of starchy and saccharine aliment. It is certain that in some cases this method of procedure will produce the entire removal of sugar from the urine. If this be the case, it is very clear that the liver requires these materials in order to form sugar, and that if they be withheld, it ceases to produce an excess of this substance. For the time being, therefore, an apparent cure at least is obtained. The second plan consists in the administration of alkalies, as recommended by Mialhe and Contour. This method of treatment is occasionally successful, more especially if adopted in connexion with the preceding one. This is a fact which we cannot but admit, and which neither confirms nor invalidates the views of M. Bernard, although it cannot, indeed, be explained by reference to his theory. We must regard it, therefore, as an acknowledged fact in therapeutics, purely empiric, but yet true. With regard to our second query, viz., whether the theory of M. Bernard has hitherto led to a rational plan of treatment, we must answer in the negative. Whether it may yet do so, the future alone can decide."—P. 252.

We regret that our limited space forbids us from following the authors in their description of the urine and its pathological conditions, or of the secretions and excretions of the membranes. We must for a similar reason pass over their chemical analyses of various morbid conditions of bone, as osteo-malacia, rachitis, caries, necrosis, tophaceous concretion, exostosis; and their sketch of pus, tubercle, and cancer. With respect to the latter disease, MM. Becquerel and Rodier incline to the belief that the characteristic mark of the affection is the peculiarity of the cell, and that those German microscopists who do not admit the existence of a specific cancer-cell have simply failed to detect it owing to the

imperfection of their instruments. The chemical analysis of cancer in its various forms is described at some length, but it is admitted that this mode of investigation throws no new light upon the nature of the disease, and that the whole subject is open to fresh inquiry.

It would be unjust to conclude this notice without a warm tribute of approbation to Dr. S. T. Speer, for the careful and efficient manner in which the translation has been executed. The work of MM. Becquerel and Rodier, under any form, is a great and welcome contribution to Medico-chemical science, and in its present shape will constitute a most valuable addition to the library of the British physician.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

CASE OF GENERAL EMPHYSEMA IN PERTUSSIS. (By Dr. BIERBAUM.)

The child was 3 years old, and previously healthy, and had suffered for about three weeks from not very severe pertussis. On the 2nd of March, however, febrile symptoms appeared, and on the 12th the author saw him. The face was pale, and so considerably swollen that the eyes could not be opened. The neck was also greatly swollen, especially in front, as was also the thorax, the sternum lying in a depression. The entire surface of the abdomen was in like manner swollen, the linea alba lying in a deep furrow. Behind, the spine lay in a like depression, owing to the great swelling of the whole posterior part of the trunk. The condition of the sexual organs excited especial attention. The scrotum was enormously distended, measuring across its middle $9\frac{1}{2}$ Rhenish inches. It did not hang down, but projected almost straight from the body. It was distended almost to bursting, the skin seeming transparent, and highly injected, and the tumour feeling excessively light and elastic. The raphe formed a smooth depression, dividing the scrotum into two semicircles. The penis was almost lost in the swelling. The thighs were but little swollen, and the legs not at all, except a little at the patellæ. The arms, however, were considerably swollen, as far as the wrists. In all parts the swelling exhibited the same characters, being soft without change of colour, and its temperature being rather below than above the normal. On pressure, crepitation and temporary local dispersion were produced. The cough had never been violent, or attended with much embarrassment of respiration. To percussion, the chest returned a tympanitic tone, and respiration was puerile and unaccompanied by abnormal sound. Under temporizing treatment, all the inconveniences disappeared. During twenty years' practice, Dr. Bierbaum never met with a similar case, and believes that few such are on record. Slight partial emphysema is sometimes met with in severe pertussis, having, however, more the appearance of œdema than of emphysema. The author suggests that a slight bronchitis, which was present when the œdema first appeared, had more to do with its production than the pertussis itself.—*Berlin Med. Zeit.* No. 22.

ON UREA IN PLEURITIC EFFUSION IN INFANTS. (By Dr. C. HECKER.)

The wife of a mechanic, aged 38, applied on account of supposed labour-pains, on July 24, she expecting in the middle of August. For some weeks past the lower extremities had been œdematous, and the urine contained enormous quantities of albumen. In other respects she was tolerably well, and able to attend to her household duties. On the 30th of July pneumonic infiltration of the right lung occurred, and the next night rapid delivery took place, without any sign of eclampsia. The child was still-born, owing to the funis twisting around its neck. The usual appearances seen in still-born children were observed, especially numerous ecchymoses in the lungs and heart; and the pleural cavities contained an abnormal amount of fluid, without any disease of the pleura being observable. This fluid, which might amount to about two ounces, contained a considerable quantity of urea, crystals of this substance being exhibited under the microscope both in its pure state and in its combinations with the nitrates and oxalates. The mother died of pneumonia the 9th of August. In relation to the presence of urea in the

pleuritic exudation in children, Dr. Hecker mentions the case of an infant born September 8, and dying early in October. The left pleura contained three or four ounces of fluid, which furnished crystals of nitrate of urea. There was no accumulation on the right side.—*Virchow's Archiv.* Band ix. p. 305.

CASE OF GALACTORRHOEA.

By M. GUÉNEAU DE MUSSY.

An interesting case of galactorrhœa recently came under M. Guéneau de Mussy's care. A woman, aged 20, previously in excellent health, was confined with her first child. The secretion of milk was so abundant that she was able to suckle two children besides her own; and after a while it flowed away without suction, and inflammation, with abscess, followed. This was relieved, but the breast continued to increase in size; and although the woman had given up suckling, the milk flowed away for some time at the rate of twelve pints per diem. When first seen by the author, several months after her delivery, the daily discharge of milk still amounted to seven pints in the twenty-four hours, and the gland was hard, irregular, and painful to the touch. The woman was feverish and very thirsty, and much wasted. He ordered cherry-stalk water, containing some bicarbonate of soda, as a drink, and one of the following pills twice a-day:—Protoiodide of iron, iron filings, aa gr. xxx. , in pil. 20. Besides these there were ordered twelve sulphureous baths, cold applications to the breast, and general frictions by means of a flesh-brush. This treatment was followed with exactitude, and the woman was quite well in a month.—*Gazette des Hôpitaux*, 139.

ON RHEUMATIC TENOSYNTITIS.

By M. CHASSAIGNAC.

M. Chassaignac considers that rheumatic inflammation of the tendons is an affection that has not as yet been sufficiently studied. The patient who elicited these remarks recently entered the hospital on account of a rheumatic hyarthrosis of the right knee, having already suffered from several attacks of rheumatism; so that there could be no doubt of the diathesis being present. There was observed also, in this patient, on his admission, a painful hypertrophy of the tendo-Achillis on each side. It was not an example of the affection which Velpeau has termed crepitating tenosynitis, and which consists in an inflammation of the sheath of the tendon, and is characterised by a serous effusion, accompanied by a kind of crackling analogous to that which is heard on pressing starch or hardened snow between the fingers. Here it is an affection of the tendon itself; for, on the one hand, the tendon Achillis has no synovial sheath, and the thickening can only arise from a modification of its proper tissue; and on the other hand, the hardness was such in this case as could only arise from an increase of size exclusively due to the tendon. The induration proceeded from below upwards, and at one period the upper part of each tendon having become inflamed, it could be felt hard and tender, as could the foliaceous prolongations it sends among the muscles of the calf—prolongations that could be easily perceived by simple palpation. The induration was attacked by vapour douches, and through their agency the movements, which were at first painful and difficult, have become more free, while the tendons have been rendered more supple, and the hypertrophy has diminished.—*Moniteur des Hôpitaux*, No. 92.

EXCERPTA MINORA.

Iodine in Dysentery.—Dr. Palm states that during an epidemic of dysentery, when other means had failed, very effectual relief to the distressing tenesmus was given by the following enema: Iod. $\mathfrak{g}\frac{1}{2}$, iod. pot. $\mathfrak{g}\text{ij}$, in $\mathfrak{z}\text{ii}$. of some slimy vehicle, employed once or twice a day for two or three days; half the quantities being used for children.—*Schmidt's Jahrb.*, Band XCI. p. 295.

Iceland Moss and Cod-liver Oil.—M. Sauvan has published a formula which Professors Estor and Alquié have found of use in chest affections. Jelly of Iceland moss, 125; gelatine, 5; cod-liver oil, 125 parts; ess. of bit. almonds, 2 drops. The gelatine is to be dissolved in the jelly, which is then to be strained into the vessel that is to contain it. Next add the oil, stirring well with a spatula until a homogeneous jelly is produced. To this Professor Estor also adds 60 parts of syrup of phellandrium. The dose is two or three tablespoonfuls a-day.—*Ibid.*

OUR GREAT ONES OF THE PAST.

MEN OF THE BRITISH SCHOOL.—No. IV.

JOHN CHEYNE, M.D., F.R.S., M.R.I.A.

TAKING advantage of the liberty we claimed of selecting great men for our portraits independent of any chronological method, we pass from the days of the second Charles to those of the third George, and take as the subject of this memoir one in whom each part of the United Kingdom may claim a share. Born and educated in Scotland, he spent the best and most active portion of his life in Ireland, and passed his declining days and died in England. He belonged to the Medical Profession by descent on both the paternal and maternal side, and was born on the 3rd of February, 1777, in the town of Leith, where his father, John Cheyne, practised Medicine and Surgery. In an autobiographical sketch (a), (from which, as a source of indisputable authenticity, we shall, of course, draw largely in this memoir,) he describes his father as a man of great cheerfulness, benevolence, good sense, and singleness of mind, who would visit the poor as promptly as the rich, and give his half-crown to those who had no means of procuring food as freely as his prescription.

His father had succeeded his uncle, also John Cheyne, a kindred spirit, who had acquired the name of "the friend of the poor." Of Dr. Cheyne's great-grandfather little is known, except that he and his family were devoted to the Stuarts, to whose agents they had lent considerable sums of money, which were never repaid; and that his portrait, by Sir John Medina, still hangs in the hall of the College of Surgeons of Edinburgh, of which he was a member, as were also Dr. Cheyne's father and grandfather. The fact just mentioned is, however, evidence that he had attained to some distinction among his Professional brethren.

Dr. Cheyne's mother, whom he describes as an ambitious woman, of honourable principles, constantly stimulating her children to exertion, and intently occupied with their advancement in life, was the daughter of Mr. William Edmonstone, Fellow of the Royal College of Surgeons, and of his wife, Cecilia Bayne, sister to William Bayne, who was mortally wounded in Lord Rodney's great battle, while in command of the "Alfred," seventy-four-gun ship, and was the senior of the three captains to whom a monument was erected in Westminster Abbey. This Cecilia Bayne was daughter of Alexander Bayne, Professor of Scots Law in the University of Edinburgh, whose life appears in the "Penny Cyclopædia," and who is noticed in D'Israeli's "Calamities of Authors."

After passing four years at the Grammar School of Leith, young Cheyne was, by the advice of one of his father's friends, sent to the High School of Edinburgh. Though only in his 10th year, he was at once placed under the care of the rector, or head master, for whose class he was in no respect prepared. In consequence of this ill-advised step he was very unhappy, being unable to keep up with many of his companions; and he tells us that he often feigned sickness, and submitted to take medicine, in order to be kept from school. The rector, though a very eminent teacher, was a vain man, and so passionate as to inspire his scholars with the utmost terror. He seems to have used corporal punishment with the utmost severity. The consequence was that young Cheyne felt the most unbounded impatience to escape from his rule; and so great was the impression of terror on his youthful



mind, that the form of the rector continued, he assures us, during his whole life to preside over a great portion of his uneasy dreams.

He was next placed under the care of a clergyman of the Episcopal Church of Scotland, a good scholar, but an idle and dissipated man. Both master and pupil had more relish for frivolous talk than for Homer or Virgil; and as the former did not exact careful preparation, the latter did not read much for him; so that, although he went to him daily for two years, he made but little addition to his knowledge of Greek or Latin.

So early as in his thirteenth year he began to attend his father's poor patients. He was sent to ascertain that they were supplied with medicines, to bleed them, dress their wounds, and report upon their condition. In this way he acquired an early acquaintance with diseases; and he attributed

his subsequent success in treating them more to his knowledge of their expression, than to any other qualification that he possessed.

Before he reached his sixteenth year he had begun to attend Medical lectures in the University of Edinburgh; and in this premature commencement of his Professional studies, which he considered to have been the second false step in his education, there was nothing apparently incongruous, as he had attained full growth, and had the appearance of a young man of eighteen or nineteen. Dining at a boarding-house every day with several Medical students who were qualifying themselves for the Doctorate, he found that he was as well acquainted with Medical subjects as most of them, and, therefore, unhappily resolved to present himself for examination when they did. By attending a club, the members of which alternately examined each other in anatomy, physiology, the theory and practice of physic, etc., and with the assistance of Mr. Candlish, a celebrated *grinder* of that day, his superficial knowledge of Latin and of Medical science was made to answer the end in view; he passed his examination without difficulty, and obtained a Medical degree in June, 1795. It will soon be seen that Dr. Cheyne was not of the stamp of mind to remain long satisfied with the possession of the art of *concealing ignorance* imparted by the rote-system of instruction.

On the day after he obtained his degree, having previously passed an examination at Surgeons' Hall, he left Edinburgh for Woolwich, the head-quarters of the Royal Regiment of Artillery, in which corps he had received the appointment of Assistant-Surgeon. With it he served in various parts of England till the end of 1797, when he obtained the local rank of Surgeon, and accompanied a brigade of horse artillery, commanded by Lieutenant-Colonel, afterwards Sir Edward Howorth, to Ireland. With part of that brigade, commanded by Lord Bloomfield, he was present at the actions with the rebels which took place at Ross, Vinegar Hill, etc., in 1798. While he was Assistant-Surgeon and Surgeon in the Artillery, from 1795 to 1799, his time was spent in shooting, playing billiards, reading such books as the circulating library supplied, and in complete dissipation of time. In fact, he learned nothing but ease and propriety of behaviour. At last he became dissatisfied with his prospects, anxious to distinguish himself in his Profession, and persuaded that, unless he made a strenuous effort, he must be content with a subordinate station, which his feelings would not have permitted him

(a) Prefixed to "Essays on Partial Derangement of the Mind, in supposed Connexion with Religion." By the late John Cheyne, M.D., etc. Dublin: William Curry and Co. 1843.

tamely to occupy. He therefore left the Horse Artillery, and returned to Scotland in 1799, when he was appointed to the charge of the Ordnance Hospital in Leith.

We now come to a new era in Dr. Cheyne's life, when he was about to lay the foundation of the well-deserved eminence he afterwards attained to. On his return to Scotland he undertook to act as assistant to his father, whose practice, especially among the poor, was very extensive; and he at once adopted a system well calculated to lead to Professional success. From the cases which fell to his lot in the division of the business of the day, he selected the most interesting; these he journalized, and when he foresaw that a disease would end unfavourably, he took measures to ensure permission to examine the body. In these necroscopic investigations he was largely assisted by Mr. (afterwards Sir Charles) Bell, with whom he at that period formed a friendship, and who was occupied in the study of pathology. Mr. Bell "opened most of the bodies he obtained permission to dissect, taught him many things he might not otherwise have learned, and confirmed his taste for distinction." "As an example of diligence in study," adds Dr. Cheyne, "Mr. Bell could not be surpassed, and it was already manifest that he was a man of genius."

Dr. Cheyne now fixed upon a definite object, and his plans were soon formed. He resolved, whenever he should think himself fit for the undertaking, to attempt to establish himself as a Physician in a large city, and, in the meanwhile, to devote every leisure hour to the necessary preparation.

His attention was directed principally to the diseases of children, and these formed the subjects of the earliest efforts of his pen; and to acute and epidemic diseases, which he had the fullest opportunity of studying. When a well-marked case occurred, or when an epidemic arose, he obtained the best monograph he could on the subject, and attentively compared it with the opinions of the most experienced of his Professional brethren, whom he had frequent opportunities of meeting, and then he filled up his case-books. Thus, by means of observation, reading, and the experience of others, his mind was made up on the most important points of practice, and he acquired a facility of prescription, especially in acute diseases, which proved of great advantage to him, particularly in dispensary practice. With respect to chronic diseases, in addition to the assistance he derived from books and observation, he obtained a mass of consultations, many of them written with great care by the most eminent Physicians in Edinburgh during the middle and towards the end of the eighteenth century, which had been preserved by his grandfather, father, and grandfather.

In 1801, at the age of 24, Dr. Cheyne became an author; his first essay in this department was on "Cynanche trachealis, or Croup," a work which he subsequently enlarged; and in the same year he published a treatise on the "Bowel Complaints of Children, more immediately connected with the Biliary Secretion, and particularly of Atrophica ab lactatorum, or Weaning Brash." These were brought out in royal octavo, in a style highly creditable both to the publishers and to the spirit of so young an author. They have also the advantage of being illustrated with beautifully executed coloured plates, from drawings by Mr., afterwards Sir Charles Bell.

The principles on which Dr. Cheyne based his hopes of professional success are fully described in his Autobiography, and are well deserving of attention.

"I endeavoured," he says, "to become acquainted with the characters of those who moved in the highest ranks in the Profession, and to discover the causes of their success; and I ascertained that, although a man might acquire popularity by various means, he could not reckon upon preserving public favour unless he possessed the respect of his own Profession; that if he would effectually guard his own interests, he must in the first place attend to the interests of others; hence I was led carefully to study and liberally to construe that part of medical ethics which regulates the conduct of Physicians towards each other."

"The Surgeons of Edinburgh, during this period of my residence in Scotland, were thrown into a state of disagreeable excitement by an attack which Dr. Gregory made on their connexion with the Royal Infirmary. Dr. Gregory assailed the system of attendance in a series of pamphlets written with great spirit and humour, and succeeded in effecting its overthrow. The angry feeling which I saw at this time exhibited was such as to lead me to resolve on avoiding Professional

disputes, and suffering injury rather than attempting to right myself, unless my character were likely to be endangered by forbearance. I have since shut my eyes and ears against some very obvious attempts which have been made to prove that I had acted ignorantly, and have lived to see my opponents become steady and useful friends."

After passing nine years in the study of pathology and in the practice of medicine, Dr. Cheyne resolved upon leaving Scotland, and instituted inquiries in several parts of England without discovering any situation likely to suit him. He was more anxious for an opportunity of distinguishing himself than of securing a large income, and with that view offered his services to Dr. Rollo, Surgeon-General to the Artillery, who some years before wished to establish a school of clinical medicine at Woolwich for the instruction of the Medical Officers of the Artillery, then a numerous body. He proposed to give clinical instruction to the junior officers of the establishment, asking in return the rank, pay, and allowances of a Physician to the Forces. But his application came too late; disappointment and disease had quenched Dr. Rollo's zeal for the improvement of the department over which he had presided with great ability, and Dr. Cheyne never received an answer to his application.

In 1808 Dr. Cheyne published his third Essay on the Diseases of Children, the subject of the work being Hydrocephalus acutus; in the Preface he observed that he had now in separate essays considered all the diseases peculiar to the stage of life between weaning and puberty, with the exception of Chorea Saneti Viti. In the following year he brought out an enlargement of his original Essay on Croup, now under the title of "The Pathology of the Membrane of the Larynx and Bronchia," and in 1815 he produced a second Essay on Hydrocephalus; and in a second edition, published in 1819, he incorporated the substance of both essays, with such additional information as his extended experience enabled him to communicate.

Soon after the appearance of the first Essay on Hydrocephalus, he received a very particular account of the state of the Medical community in Dublin, which probably, he observes, made the deeper impression on him as it came from one who was not aware of his intention of removing from Scotland. He immediately prepared for a visit to that city, whither he went in the latter end of March, 1809, leaving Mrs. Cheyne in Antrim with her father, the Rev. Dr. Macartney, vicar of the parish.

Dr. Cheyne soon determined on remaining in Dublin, where he found the Profession very highly respected, chiefly owing, he remarks, to the eminent Physicians who had flourished there during the preceding fifty years:—Dr. Smith, remarkable for his munificence (b); Sir Nathaniel Barry, whom Mr. Grattan once characterized to Dr. Cheyne as the most accomplished gentleman he had ever known; Dr. Quin; Dr. Plunket, the witty, accomplished, and amiable brother of the late Lord Plunket, sometime Lord Chancellor of Ireland; Dr. Perceval, distinguished for scientific knowledge, but more so for his philanthropy; the memory also of M^r.Bride, Cleghorn, and Purcell was still cherished by many. To these latter might not Dr. Cheyne have added the names of Sir Patrick Dun, Dr. Steevens, Bartholomew Mosse, and Mr. Doyle, each of whom, Sir Patrick Dun by the foundation of the School of Physic, and the others by the endowment of great Hospitals, have been permanent benefactors of their Profession and of their fellow-men.

(b) During the latter years of his life, it was Dr. Smith's custom to entertain at dinner on Christmas-day twenty-four widows, all of whom had seen better days. They were, in fact, ladies, who in the time of their prosperity had been his patients. They were received with all due formality and kind consideration. The dinner was the most sumptuous that money could procure, the wines were of the choicest, and on every three ladies a livery servant attended. At the head of the table sat the maiden sister of the Doctor, who himself took the foot. He had never married. When the wine and dessert were laid, the servants retired, a silver cover having first been placed before each widow—under this was a twenty-pound note, her yearly stipend. The understood etiquette was, that no allusion should be made to this munificent gift. Tea and coffee were served in the drawing-room, after which each lady returned home in a sedan-chair provided for her, attended by a servant.

Dr. Smith left the most minute directions for his funeral, and these contrast singularly with those given by Dr. Cheyne, to be hereafter quoted. He desired that he should be buried at Kilmacnogue, in the county of Wicklow, mentioned by name those who were to be invited to his funeral, and directed that on their return they should have a sumptuous dinner at Quin's Hotel in Bray, specifying with the utmost particularity the dishes, wines, etc., which were to be provided for the entertainment.

Dr. Cheyne soon discovered that the field was extensive, and the labourers liberally rewarded. The Physicians whom he found in the confidence of the public were mostly of the school of Cullen: they were possessed of good general information, but relied chiefly on the accuracy of their symptomatology; they had paid but little attention to morbid anatomy. Much of the pure Medical practice of Dublin was passing into the hands of the Surgeons, who, although less skilful in the treatment of acute diseases, were better acquainted with the nature and tendency of the organic lesions. In this state of things he discerned good grounds of hope: he was sufficiently well acquainted with acute diseases, and he felt indebted to Sir Charles Bell for having imparted to him a taste for pathology.

In the latter end of 1809 he took his position as a candidate for public favour in Dublin, where he had passed the summer, neither expecting, nor, he adds, indeed wishing for rapid advancement. What is easily acquired, he remarks, is little valued, and not unfrequently soon lost. He had a few friends, who, being much dissatisfied with his apparent apathy, and the obscurity in which he lived, wished him to go into company, and even to give entertainments to those who had it in their power to advance his interests; and so much was he urged to this course, that at last he reluctantly yielded to their importunities; but as his circumstances did not admit of his providing entertainments with comfort to himself, he refused to repeat the injudicious experiment. It is true that his friends could derive but little encouragement from his apparent progress; from the 9th of November, 1810, to the 4th of May, 1811, a period of nearly six months, he received only three guineas; but he felt that prejudices against him were giving way, and that he was beginning to be regarded with goodwill by some of the most respectable of his Professional brethren, who, in the latter end of 1811, procured for him the situation of Physician to the Meath Hospital.

This was for him a very important step; for although the old Meath Hospital was a small and gloomy building, yet his colleague, Dr. Egan, was much esteemed; and among the six Surgeons to the Hospital, there were at least three, (Mr., now Sir Philip Crampton, Mr. Richards, and the second Dease,) who stood high in their Profession; moreover, the officers of that Hospital are elected by the members of the Medical Board, who thus placed him on their own level. His situation, therefore, not only afforded him an opportunity of evincing attention and knowledge of disease, but it was the best attestation he could have obtained of competency to perform the duties of an Hospital Physician. What he felt he most required, was to be sufficiently accredited.

During the war the College of Surgeons had become an extensive nursery for the supply of Medical Officers to the navy and army; and about this time the directors of the School of Surgery thought it expedient to add to their other professorships one of the practice of physic. Dr. Cheyne's attendance upon the Meath Hospital procured his election to this office; his lectures at the College of Surgeons, which were very full on the subject of military medicine, were attended by nearly all the Surgeons and Assistant-Surgeons in the garrison, to whom they were free. These lectures, of which he delivered five courses, and his duties at the Meath Hospital, the seat of a crowded dispensary in which he daily prescribed for all the Medical patients, occupied whatever time could be spared from practice, now increasing as rapidly as his friends could wish. In 1812 his fees amounted to £472.

In the latter year Dr. Cheyne published a volume of "Cases of Apoplexy and Lethargy, with observations upon the Comatose Diseases," a work which he dedicated to Dr. Hamilton of Edinburgh.

In October, 1815, he was appointed by the Lord Lieutenant one of the Physicians to the House of Industry, which lay at a distance of two miles from his house. He had there to visit daily upwards of seventy patients in acute diseases, most of them labouring under fever, of whom probably eight or ten demanded careful examination. As he had experienced and well trained sick-nurses, who allowed nothing to escape their observation, the rest of the patients required only a glance of the eye; so that the visit was always finished in little more than an hour. But Dr. Cheyne ever experienced great fatigue from the stretch of mind arising from going the round of an Hospital. Then the walk to and fro occupied more than an hour, and he invariably reached home much exhausted; he therefore felt it necessary to resign his professor-

ship at the College of Surgeons, as well as his charge of the Meath Hospital, that his private practice, which in 1816 yielded £1710, might not suffer by the extent of his official duties. In the beginning of 1818, Dr. Cheyne removed from the house in Ely Place now occupied by Dr. Jacob, where he had for some years resided, to that in Merrion Square, within one door of the north side of Leinster Lawn, in which he continued until the period of his leaving Dublin in 1831, when it passed into the hands of his friend, Dr. Croker.

When Dr. Cheyne received his appointment of Physician to the House of Industry, Dr. Edward Percival, who came to Dublin at the same time that he did, was one of the Physicians to that establishment. Dr. Percival and he immediately resolved upon endeavouring to form a Clinical School and a Musum of Morbid Anatomy at the House of Industry, both of which objects they expected, with the aid of the Surgeons, to accomplish without much difficulty. Within the precincts there was an extensive Fever Hospital, (the Hardwicke), the Whitworth Hospital for chronic diseases, spacious wards and separate cells for lunatics, a large asylum for destitute children, and an immense number of paupers with constitutions in every stage of disorganization. Their plan also included digested annual reports of the diseases which fell under their observation, and this ultimately led to the publication of the Dublin Hospital Reports. Dr. Edward Percival shortly after settled in Bath; consequently Dr. Cheyne was left alone. The fever which ravaged Ireland for upwards of two years became epidemic in Dublin in 1817, and the present Grangegorman Penitentiary, as a branch of the House of Industry, was converted into a dépôt for fever patients, of whom upwards of 700 were accommodated in that institution. Finally, in many of the wards dysentery afterwards broke out, and became the chief object of Dr. Cheyne's solicitude, during the latter part of his connexion with the House of Industry.

The Dublin Hospital Reports here alluded to are well known as containing many most valuable papers by eminent Physicians and Surgeons in Dublin and in the provincial parts of Ireland. But five volumes appeared, which were published in 1817, 1818, 1822, 1827, and 1830. To these Dr. Cheyne contributed ten papers, including two reports of the Hardwicke Fever Hospital, the second containing a brief account of the fever epidemic in Dublin in 1817, and a Report of the Whitworth Hospital, with an account of dysentery as it appeared in Dublin in the latter end of 1818, and in Limerick in 1821. The subjects of Dr. Cheyne's other communications were Melæna, to which he appended observations on the alternate excess of morbid action in the mucous and serous membranes. Jaundice, unaccompanied with any discoverable disease of the liver, or turgescence or obstruction of the biliary ducts; the virtues of James's Powder in the apoplectic diathesis; apoplexy, with fatty degeneration of the heart; the feigned diseases of soldiers; fatal erethism of the stomach; four instances of a very rare disease occurring in different members of the same family; and the use of small and frequently repeated bleedings in hæmoptysis, and incipient phthisis.

Dr. Cheyne's other contributions to periodical literature, consisting of a case of bronchial polypus, and of observations on the effect of purgative medicines, appeared in the fourth volume of the *Edinburgh Medical and Surgical Journal*.

Upon the death of Dr. Harvey, the Physician-General to the Army in Ireland, Dr. Cheyne applied without success for his situation. There were several applicants whose claims the Lord-Lieutenant found it not easy to adjust; and, therefore, he escaped from the difficulty by appointing Dr. Perceval (c), who had not applied for the vacant office, but who, adds Dr. Cheyne, in point of character and standing, had a better title to the situation than any of those who were candidates for it. Dr. Perceval accepted the office, on condition that the Lord-Lieutenant would permit him to appoint an assistant in the duty of attending the General Military Hospital. Dr. Cheyne was applied to by Dr. Perceval to render him this assistance;

(c) Not the Dr. Percival spoken of above, but Dr. Robert Percival, for many years Professor of Chemistry in Trinity College, and an eminent Physician in Dublin, to whom Dr. Cheyne has alluded as distinguished, not only for scientific knowledge, but for philanthropy. We have heard, from very good authority, that it was a rule of Dr. Percival's to bestow in charity all the money that he received in fees on Sundays; and it is well known that, during a season of distress, he expended for a considerable time £100 per week in relieving the poor in the vicinity of his country residence at Donnybrook.

and, in order to comply with the request, he thought it necessary to resign his situation in the House of Industry. It is probable he would have had to do so before long, as his practice was rapidly increasing, and the time required by his Hospital duties was more than he could spare.

Dr. Perceval soon afterwards resigned his office, upon which Dr. Cheyne was appointed to succeed him by Earl Talbot, then Lord-Lieutenant of Ireland; his patent bore the date of October 7, 1820. The situation of Physician-General, which was abolished in the end of 1833, was conceived, when he obtained it, to confer on the possessor the highest Medical rank in Ireland; and, as his practice yielded £5000, which was about its annual average during the next ten years, Dr. Cheyne felt that he had fully attained the objects of his ambition.

His constitution, naturally weak, was always injured by fatigue of body or anxiety of mind; and hence, before long, he was obliged to circumscribe his practice, by refusing to go to a distance from Dublin, or to undertake attendances in the country. It is probable that, had his health permitted, he would have added £1500 a-year to his income.

[To be continued.]

GENERAL CORRESPONDENCE.

OPENING BUBOES BY CAUSTIC POTASS.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your issue of September 6, 1856, a query is put by Mr. Metcalfe Johnson, of Lancaster, on the practice of opening buboes by caustic potass, and I give you my remarks *in extenso* on this subject, as made in my annual report to the Medical Board, dated Poonah, March, 1854:—

“I have arrived at the conclusion, as far as the station of Poonah is concerned, that the best plan is, when suppuration has actually commenced, to bring the disease to a crisis, open, as far as matter can be detected by manipulation, by caustic potass. Thirty-six to forty-eight hours suffice for the slough to come away, when the subsequent treatment is that of a simple ulcer, healing as such by the application (on lint) of an opiate wash, or weak solution of sulphate of copper; a generous and varied diet, suitable to the wish of the patient; half or full bottle of beer, and, when considerable suppuration is going on, wine at night, in shape of negus; morphia, &c.

2nd. “I never allow a bubo to be opened by knife, as sinuses so frequently result, and the constant opening and re-opening, causing drain to the system and disgust to the patient, render him restless, irritable, and cachectic; and by reason of these I would, from the numerous sorry instances witnessed under the knife, strongly recommend the almost exclusive use of the potass, not only as being more satisfactory in its result to the surgeon, but that the constitution of the soldier is less undermined, and his services more speedily given to his corps.”

Should the above meet with favour in your eyes you can notice these remarks, made two and a half years ago, though I believe no notice has been taken of them by the Bombay Medical Board. I have treated very many cases of single and double bubo, and in a very few instances only have I been troubled by fistulas occurring, and these probably from careless application of the caustic. I am, etc.

J. TURNER, M.R.C.S.,

In Medical charge, Head-quarters, Horse Brigade of Artillery.

Bombay Presidency, Poonah, Nov. 15.

P.S. I tried in three cases the effect of a seton, from base to base, but failed most signally.

DR. RAMSBOTHAM AND DR. CHURCHILL.

[To the Editor of the Medical Times and Gazette.]

Sir,—No one has a higher sense of the duties, privileges and services of medical journalists than I have, but it appears to me that there are some matters which may be more satisfactorily settled by private and personal explanation than by public controversy. Had Dr. Ramsbotham communicated personally with me, touching the grievance complained of in his letter to you, instead of making a personal attack upon me in your Journal, I think he would have found it more satisfactory to himself; and you will allow me to add, that in my judgment,

such a course would have been, not only more simple and straightforward, but more in accordance with the courtesy usually observed among gentlemen. However, as he has chosen to lay the matter before the profession, I must ask you to afford me space for a reply.

As far as I understand him, Dr. Ramsbotham's complaint against me is, that I have stolen twenty plates from his work, “without acknowledgment;” at the same time that he confesses that he himself stole fourteen, equally “without acknowledgment,” so that I am, by six plates, a greater rogue than himself! That's the inevitable conclusion, state it as you will. The excuse of “inadvertence,” &c., must equally be applied to both of us, or to neither. So, “they who live in glass houses should not throw stones.”

But in order that your readers may understand the question, I must enter into some details. In the autumn of 1840, that is to say, sixteen years ago, I was asked by Messrs. Renshaw of London, and Fannin of Dublin, to write a treatise on Midwifery, illustrated by such plates as I might select. In the first instance, therefore, I looked over all the plates to which I had access, and finding in most cases one author copy the engravings of another, without special acknowledgment, I frankly confess that I made the best selection I could, from works on anatomy as well as midwifery, and never imagining that any one would doubt that they were so obtained, or suppose for a moment that they purported to be original, I did not specify from whence they were derived. To this rule, however, there was one exception. Before giving plates of modern instruments I asked permission of the inventors, if I knew who they were. The plates thus selected were sent to the engraver in 1840, before Dr. Ramsbotham's work appeared in “its entire shape,” and before my work was written. If, therefore, I selected any from his work it must have been when it was publishing in numbers; but as I never possessed it in that shape, I must have borrowed it. Now, here I feel great difficulty in speaking with any thing like accuracy. It is sixteen years ago, I have no notes on the subject, and the copy of the work which I must have used, if I copied any, was not my own; under these circumstances you will hardly be surprised when I say, that I do not remember whether I took any, or if I did, which they were. It is quite possible, I admit, that I did; and in doing so I was only following Dr. Ramsbotham's example.

But of one thing I am quite sure, namely, that I was not aware that any of the plates were original. I had not the book then, and so could not have read it; nay, though I have both editions now, I was ignorant of the fact until I read Dr. Ramsbotham's letter; for the volume, as you know, is a large, not to say heavy, book to read through, though a valuable one to consult. I fearlessly ask you to believe my assurance on this subject; and I think I may appeal to my works for proof of my anxiety to refer to every authority from whom I have derived any information. Moreover, late as it is now, if I have “inadvertently” copied original plates from Dr. Ramsbotham, I frankly offer him an apology, and an assurance that an acknowledgment thereof shall appear in the next edition.

The plates of the ossa innominata, sacrum, and coccyx, to the best of my belief, were copied from Moreau's first plate, as every one will conclude who consults the work. Perhaps Dr. Ramsbotham's were also.

With regard to the plates of the “forceps, vectis, craniotomy, and other instruments,” including the “long forceps,” which Dr. Ramsbotham accuses me of pirating from his work, all I can say is, that they were drawn, under my own eye, from instruments which I bought in Edinburgh, when a pupil of the late Dr. Hamilton in 1832, and they were sold as the instruments he recommended. They may, doubtless, be the same as Dr. Ramsbotham's; perhaps, indeed, Dr. Hamilton copied them from him!

I never knew that the decapitating-hook was Dr. Ramsbotham, senior's. I copied it from Dr. Davis's work, believing it to be his own, and having asked his permission to use his plates.

But Dr. Ramsbotham has yet another grievance. Not content with stealing his plates, I stole his engraver also! “This was the unkindest cut of all!” But fortunately for my credit, I did not know who his engraver was, in the first place, and secondly, I had nothing to do with the selection. I was requested to have the drawings made here, and they were all executed by the late Mr. Neilan, and then transmitted to Mr. Renshaw, who chose his own artist, and who I hope

will be able to satisfy Dr. Ramsbotham that in choosing Mr. Bagg, he had no felonious intent.

There is one passage of virtuous self-complacency to which I must call your attention. As a contrast to Dr. Churchill's wicked piracy he observed, "but so tenacious was I of appropriating the labours of recent authors, that I wrote to Dr. Montgomery, personally a stranger to me, for permission to copy one of his plates, which after a communication with his publisher was kindly conceded." Now, I beg to ask Dr. Ramsbotham whether that request was made before or after the plate was engraved? "Those that dwell in glass houses," &c., as I have said before.

In conclusion, Sir, I should like to know, first, why this charge against me has slumbered so long? and secondly, why it has been now brought forward? It is fourteen years since my work first appeared, and it has gone through three editions, so that there has been both time and opportunity for correction; and I can truly say that I should gladly have made any reparation due to Dr. Ramsbotham at any time. I have never hesitated to acknowledge errors or mistakes, and have always felt thankful to those who pointed them out. Was it just, then, to himself or to the public or to me, that he should keep back so long? what he now thinks so important. And he had a good opportunity, for soon after my work was published, he wrote a very indignant letter to the *Medical Gazette*, about some statistics of his father's which I had published, and which he thought likely to be injurious to his reputation. I was surprised, I confess, as the same statistics had been published years before in the *Dublin Journal*, without exciting any remonstrance on his part; but I attributed it to a feeling of rivalry, which I very much regretted. In that letter, there was no word of my having copied his plates.

I repeat, Sir, I cannot understand the delay, but I see a gleam of comfort and of hope, in the fact, that Dr. Ramsbotham's period of incubation (of a grievance) is between fourteen and fifteen years; for ere that period comes round again, we shall neither of us be inclined for controversy. I most heartily trust, that in this respect, he may afford us an example of "protracted gestation."

I have the honour to be, &c.

FLEETWOOD CHURCHILL.

[To the Editor of the Medical Times and Gazette.]

SIR,—Some people have a great aversion to prefaces, and Dr. Ramsbotham doubtless belongs to this class. He would probably as soon have dissected a woman who had died of puerperal fever as have cut open the preface to Dr. Churchill's Manual. It would have been well, however, if he had made an exception in this case, for in it he would have found a balm which would have prevented him from being so "much aggrieved." Dr. Churchill says, in the preface to the first edition, "The object of the publishers of this volume is to offer to the student in midwifery a work, embracing the modern discoveries in the physiology of the uterine system, with all the recent improvements in practice, in a condensed form, amply illustrated, and at a moderate price. At their request I have undertaken the literary department, and I must confess, with diffidence, after the excellent treatises of Drs. F. Ramsbotham and Rigby. I have, however, entered more fully into the physiology of the system than they have thought necessary; nor have I hesitated to avail myself of their labours, and those of other distinguished authors, so as to render the theory and practice as complete as possible. I regret very much that it was incompatible with the size of the volume to admit ample references; however, after the avowal I have just made, it will be understood that their omission has resulted neither from a wish to claim the merit of originality, nor from a desire to save myself trouble."

Is it fair, after this eulogium, acknowledgment, and explanation, to charge Dr. Churchill with "an act of piracy"?

I sincerely regret the space which Dr. Ramsbotham's letter takes up in your valuable Journal, and lest the same may be said of mine, I conclude; not, however, without referring all interested readers to the second edition of Dr. Churchill's Manual, where they may read of a little feud which existed some years ago between Dr. Ramsbotham and Dr. Fleetwood Churchill.

I am, &c.

JAMES H. AVELING. M.B.

Chapelton, near Sheffield. December 29, 1856.

MERCURIAL FUMIGATION.

[To the Editor of the Medical Times and Gazette.]

SIR,—Mr. Spencer Wells, in your Journal last week, alluded to a spirit lamp used for mercurial fumigation which I have lately constructed, and I shall be obliged if you will make it known to your readers by the drawings I enclose. One lamp is used for water, the other for mercurial vapour, and they can be used together or separately.

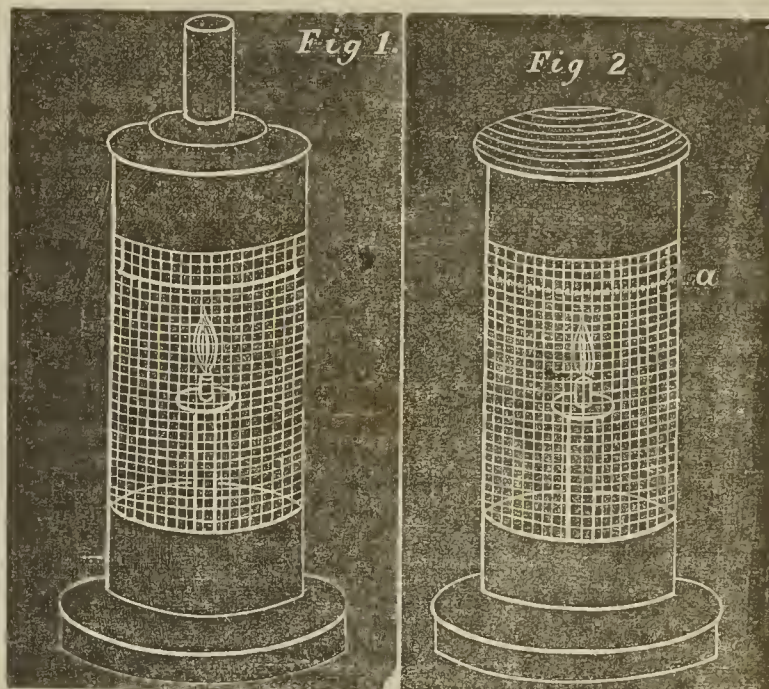


Fig. 1 represents the vapour bath, water being placed in the cylinder above the lamp.

Fig. 2 shows the lamp used for mercurial fumigation, the mercury being placed on the plate *a*, when used with funnel shown in Fig. 3 for local application to the throat or any particular part of the body. If the funnel be not used the mercury is placed on the top plate seen in Fig. 2.

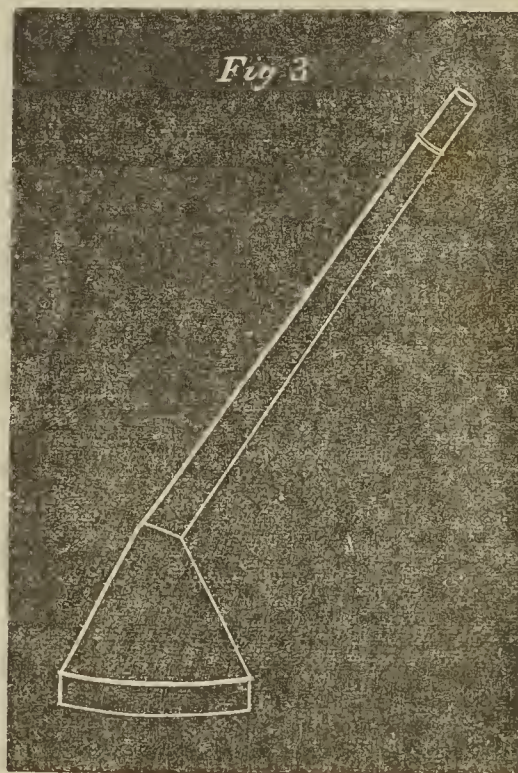


Fig. 3 merely represents the funnel.

I am, &c.

Portugal-street, Dec. 23, 1856.

W. MATTHEWS.

SIMPLE METHOD OF PREVENTING ACCIDENTS FROM CHLOROFORM.

[To the Editor of the Medical Times and Gazette.]

SIR,—Your correspondent "Purvus," in expressing his views, has, as he may find by reference to page 79, and Rules

1 and 11, page 85 and 87, of my little book—been anticipated. We differ, however, thus far, that not only do I advocate a stimulant being given *prior* to the administration of chloroform, but also *during* the time it is being used, but of course in the intervals of labour-pains, and not simultaneously with it. When chloroform may be administered during a period of several hours, it must be obvious that the effects of a stimulant given prior to its use may either subside, or be neutralized by the chloroform. I consider this a matter of great importance, and which I have elsewhere fully entered into.

I am, &c.

J. R. PRETTY, M.D.

31, Bayham-terrace, December 27, 1856.

REPORTS OF SOCIETIES.

ARMY MEDICAL AND SURGICAL SOCIETY.

DECEMBER 6.

Dr. ANDREW SMITH, President, in the chair.

THIS was the first meeting of the Society. It took place at the Army Medical Board, and was numerously attended by officers of the department.

Mr. BLENKINS, of the Grenadier Guards, introduced the subject of

ANEURISM TREATED BY COMPRESSION,

and read the report of a case of popliteal aneurism which had occurred in a soldier of his regiment, and had been cured in 24 days. The application of a seven pounds weight in the groin had been found to be the most efficient and least irksome means of applying the pressure. The contents of the sac were not absorbed, suppuration took place, and the whole fibrinous mass forming the interior of the tumour eventually escaped through the opening which had been made for the discharge of the matter. The mass, on admeasurement, was found to be four inches in diameter, having almost a circular form. The sac subsequently contracted and closed, and the man recovered the use of his limb. The author of the paper then referred to all the known statistics of aneurism by deligation and compression, showed how immensely superior the results were in favour of the latter mode of treatment, and expressed his conviction that no case should be ligatured primarily that was adapted for this mode of treatment. He expressed himself as decidedly opposed to the principles laid down by Mr. Syme, of Edinburgh, on this head, as when compression failed, it rendered the secondary operation more certain of success by diminishing the risk of gangrene. In every case of popliteal aneurism which had occurred in the Brigade of Guards, since the revival of this method by the Dublin Surgeons, this means had been resorted to, and in every instance with success. Mr. Blenkins looked forward to favourable results from the application of pressure to the distal side of the artery, in cases where it could not be adapted to the proximal end of the vessel. He also alluded to a preparation which was on the table, demonstrating a successful cure by compression for popliteal aneurism, which had occurred in the Coldstream Guards.

Mr. PELHAM related a case of

POPLITEAL ANEURISM OF THE LEFT LEG,

which had occurred at Chatham under the care of Mr. Dartnell, in which two tourniquets or wooden clumps had been applied over the femoral artery; one at about a hand's breadth above the knee, and the other below the groin; the clumps being tightened or relaxed alternately, as the pressure of one or other became irksome. On the 4th day, pulsation had entirely ceased in the tumour; and on the 6th day, the pressure of the tourniquets was loosened; on the day following they were removed altogether, and at the end of somewhat less than three months he was discharged for duty in the garrison, where he remained under observation for two months longer, and then rejoined his regiment in perfect health. Long prior to his departure, the tumour had entirely disappeared. The circumference of the limbs was alike at every part, the temperature the same, and the patient walked without any lameness. Mr. Dartnell remarked that, as far as he was aware, there was no case on record of popliteal aneurism where the cure by compression had been so rapidly successful.

Dr. MONRO alluded to the case which had occurred in the Coldstream Guards, and which, as the author of the paper had stated, furnished him the means of displaying to the Society the beautiful preparation on the table. The patient was admitted into hospital on the 19th of April, 1852, with popliteal aneurism of the left leg, about the size of a small orange. Compression was commenced on the 22nd by means of an instrument invented by Mr. Phillips of the Westminster Hospital. The pressure was made at first on the artery, immediately below Poupart's ligament. In about two hours, however, so much pain was complained of, that the instrument was removed. Being convinced that the pain complained of was excited more by alarm than anything else, manual pressure was made next day, about an inch and a half below the origin of the profunda, and this was kept up by the assistance of the convalescents in hospital for three days, for about eight hours each day. The man did not complain of any pain by this method, and said that he thought he could now bear the employment of an instrument; a clump tourniquet was accordingly placed on the thigh on the 26th, and moderate pressure only made on the artery; the sac was allowed to pulsate feebly. On the 8th day the pulsation in the sac had entirely ceased, although no greater pressure had been made, and it had become considerably harder and smaller. The tourniquet, therefore, was removed, and nothing further was done than keeping the man in bed. He was dismissed to his duty on the 2nd of July, the functions of the limb having been restored. On the 19th of November of the same year he returned to hospital with aneurism of the abdominal aorta, and died suddenly on the 10th of December. It being a good opportunity for obtaining a preparation showing the collateral circulation in the affected limb, a coloured injection was thrown into the common iliac, on that side; and the result was, as is now observed on the 10th, a most beautiful preparation. One circumstance remarkable in the preparation is, that the femoral artery and vein, from the brim of the pelvis to nearly the centre of the popliteal space, are unobstructed, and of the natural calibre.

Dr. RICHARDSON related the following case of popliteal aneurism, which was then under treatment in the hospital of the Fusilier Guards:—Sergeant Robert Legg, aged 28, of eleven years' service, was admitted on September 10th, 1856, with a large aneurism, occupying almost the entire popliteal space of the left lower extremity. All the characteristic symptoms were present, and the tumour was very elastic, and about the magnitude of the largest sized orange. The disease was first noticed three months since. Pulsation was felt in the arteries of the foot, and the veins of the leg were distended. Three arterial compressors of different forms, but all calculated to compress the main vessel without otherwise impeding the circulation of the limb, were applied; one was placed over the arch of the pubis, the second just below the orifice of the profunda, and the third at the lower part of Hunter's canal. His diet was moderately nutritious. The instrument at first occasioned pain, but, on the pressure being frequently changed from one point to another, he soon bore it well. In a few days the pulsation had almost ceased, whilst the pressure was continued, and the tumour began to solidify. On the 26th of September the pulsation had entirely ceased, whilst the pressure from the pads had been in the interim diminished. On the 3rd of October he stated that during the past night he had felt severe pain, followed, he thought, in the morning, by a more marked diminution of the tumour. It continued to decrease gradually, and become solid, until the 19th, when the apparatus (in consequence of the entire cessation of pulsation) was taken off. The measurement of the limb, which at first was $15\frac{1}{2}$ inches round the apex of the tumour, at the last date was but $14\frac{1}{2}$ inches. He has since been allowed to get up and use moderate exercise. No constitutional disturbance ensued during the treatment except an attack of diarrhoea, which continued rather severe for about a week. For a fortnight he took the following pill twice a day: Plumbi acet. gr. ij.; pulv. opii, gr. $\frac{1}{4}$. The man can walk about at the present time with very little inconvenience.

Dr. JEPHSON, Surgeon of the 1st Dragoon Guards, also forwarded the following case to the Society, which was read by the Secretary:—Private Charles McIvors, aged 29, a healthy-looking soldier, of nine years' service, was admitted into the Regimental Hospital on the 14th November, with popliteal aneurism of the right leg. He stated that on the 9th of August, when disembarking at Portsmouth, he felt for

the first time, when exerting himself, a sensation of weakness in the right leg. A few days afterwards he marched to Aldershot, and when riding felt an uneasiness not amounting to pain. In the beginning of October, the leg became swollen from the knee downwards, but it did not prevent him from doing his duty, and was unattended with pain. On the 1st of November he marched from Aldershot to Exeter, where he arrived on the 10th, being five or six hours daily in the saddle. During this time he suffered considerable pain down the leg, which became more swollen; and on the 14th he reported himself sick. The right leg and ankle were much swollen and œdematous, the superficial veins being very prominent and distended. He stated that he had great pain, of a shooting kind, down the leg when he moved about, which did not exist on lying down. Upon examining the popliteal region, a large pulsating tumour was discovered, and on being questioned, he stated that he had observed a fulness there two nights previously, but thought nothing of it. The tumour was about the size and shape of a goose egg, projecting much to the outer side, the pulsation being entirely controlled by pressure on any part of the femoral artery, when the tumour entirely subsides, leaving a loose flabby feeling sac; on allowing the blood to return, he suffered great pain in the tumour. The measurement around the leg, at that part, was $1\frac{3}{4}$ inch greater than on the opposite extremity at the same site. No pulsation could be felt in the posterior tibial artery. The heart's action was increased, but quite healthy. Pulse 92, full and strong. V. S. ad 3xvj., and take pulv. jalapæ co. ʒij. statim. The diet was reduced to 6 ounces of bread, $\frac{1}{2}$ pint of milk, and 2 ounces of butter daily.

16th and 17th.—The tumour suddenly enlarged, and pointed towards the outer side. Rept. pulv. jalapæ co., also tinct. digitalis mxv., ter die. Pulse still above 90.

24th and 25th.—The tumour has not been increasing so rapidly since he has taken the digitalis, and his pulse is reduced to 84. Complaints of weakness, but has little pain in the leg. The thigh was shaved, and a twenty grain solution of argent. nitrat. applied three times over the skin of the groin, and front of the thigh. 27th. Pulse 94. From the 14th the measurement over the tumour had increased $1\frac{1}{4}$ inch, and the limb now was 3 inches more in circumference than the same part of the left leg. On this day, at 3 o'clock, p.m., pressure was commenced in the groin, with Carte's hip apparatus; when the pulsation in the tumour was completely stopped, and also (he says) the pain complained of in the leg. The pressure was obliged to be increased from time to time as pulsation returned in the tumour. At 5 o'clock p.m. he complained of an indescribable sensation of weakness; the pulse was 62, slow, soft, and full, but on examining the tumour it was found beating as strong as ever, and the fissure was increased. 12 o'clock p.m.—He complained much of the pressure. Carte's circular compressor was used over the middle of the femoral artery, and the pulsation in the tumour controlled by it, instead of by the hip apparatus. On the 28th the pulse varied between 50 and 60 during the whole night, but about 4 o'clock a.m. it rose to 78. He slept for several hours during the night. The pressure, which now caused very little pain, was changed about every six hours, from the middle of the thigh to the groin, and *vice versa*. The pulsation in the tumour not being allowed to return during the change, he complained of being very drowsy.

29th.—At 3 o'clock a.m. to-day, on removing the pressure, there was no return of pulsation, and the tumour had become quite solid. The temperature of the foot and leg was natural. At 5 o'clock, p.m., he complained of being hot and feverish, the bowels not having been moved since the morning of the 27th. To take a castor-oil draught.

30th.—Feels quite well, but weak; tumour solid.

December 4th and 5th.—Pulse 84; œdema and swelling of the leg much reduced, and the measurement over the tumour was increased more than an inch. Pulsation in a small superficial artery over the back of the tumour to be felt; experienced some difficulty in keeping the patient quiet, as he considers himself quite well, except for some stiffness in the back of the knee.

Dr. JEPHSON remarked that this was a very successful case of cure by compression in thirty-six hours, and was one of the kind of cases, according to some authorities, which did not admit of that mode of treatment. It was an interesting cir-

cumstance to observe the falling of the pulse from 94 to 62, about two hours after pressure was commenced, and its continuing for eleven hours to vary from 50 to 60, when it increased to 78. The solution of nitrate of silver was used with the view of rendering the skin less sensitive, and tolerant of pressure. The success of the treatment of aneurism by compression will, he thought, be found to depend greatly on the kind of instruments used, and on the case being closely watched. In this case pulsation returned in the tumour more than fourteen times during the first night, after compression had been resorted to. To the care and close attention paid to the case by Mr. Andrews, the Assistant-Surgeon of the regiment, he was indebted for so quickly bringing it to a successful issue.

Mr. BLENKINS, in reply to some remarks from Dr. Morris, considered that no venous congestion resulted from the pressure of the instrument; in the case alluded to, which had occurred in the Coldstream Guards, the vein was unobstructed down to the sac.

Dr. MACLACHLAN believed that if the records of the Medical Board were examined, a large number of cases would be found among the soldiers invalided, who had previously been cured of popliteal aneurism by compression. Considered that the paper read to the Society by Mr. Blenkins was a purely practical one, which, in a Society of this kind, was so much to be desired. The interests of a patient affected with popliteal aneurism would be much neglected, if the Surgeon neglected to resist the pressure. Alluded to the case of an old pensioner at Chelsea Hospital, who would not at first submit to the treatment by compression; in this case, it was diagnosed that the whole arterial system was diseased, and fourteen days after the application of pressure, the aneurism burst into the muscles of the leg; the artery was tied, gangrene followed, and the limb was amputated; hæmorrhage subsequently took place from the site of ligature; but the opening through which the blood flowed was small, and by pressure of the finger over the orifice the bleeding was arrested, but the man sank. At the post-mortem examination two aneurismal sacs were found, but there was no obliteration of the vein; the sheath of the vessels, however, had united itself so closely to the coats of the artery, that it was very difficult to pass a needle around it; this was to be ascribed to the effects of the pressure, and was a most desirable end; indeed, when compression had been employed, an obstacle of this kind may be anticipated as likely to happen.

Mr. BLENKINS was glad to hear the last speaker say that there was no objection to adhesion of the sheath to the artery; still Mr. Syme, of Edinburgh, thinks differently, and has adduced it as an argument against compression.

Mr. BOWER spoke of the use of Carte's double compressor, and mentioned that the results of compression were not so favourable in some hands as in others. He considered that Mr. Syme was an opponent of compression, on account of the great success which had resulted, in his hands, from the ligature; but he still thinks that every Surgeon should give compression a fair trial.

Dr. MACLACHLAN inquired what was the general treatment employed in Mr. Blenkins' case.

Mr. BLENKINS replied, that the treatment was conducted upon antiphlogistic principles, with anodynes at night, and the limb was enveloped in a flannel bandage. Spirit lotions were also employed.

Mr. WYATT alluded to some of the anomalous nervous symptoms which often ensued upon the commencement of the treatment of aneurism by compression, especially to the common symptom of drowsiness, which, although sometimes of sufficient importance to cause a temporary intermission of treatment, should not prevent its subsequent continuance.

Mr. BAKER considered that in the case alluded to by Dr. Richardson a pad in the groin had much assisted to aid the other points of pressure; as a local application to the skin, he had found much benefit from employing a powder composed of powdered alum ʒj., and starch ʒiv., mixed together.

The PRESIDENT congratulated the Society on the great success of their first meeting. Some very practical remarks had been made, which must have interested all present; and, in the name of the Society, he begged to thank the author of the paper for having excited so very satisfactory a discussion.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS.—At the usual quarterly meeting of the Comitia Majora, held on Monday, December 22, the following gentlemen, having undergone the necessary examinations, were admitted members of the College:—

DALDY, Dr., Broad-street-buildings.
DOBELE, Dr. HORACE, London.
EVANS, Dr., Lancaster-place, Strand.
FRIPP, Dr., The Mall, Clifton.
HEADLAND, Dr., Guildford-street.
HILLIER, Dr., Upper Gower-street.
RICHARDSON, Dr. BENJAMIN, Hinde-st. Manchester-sq.
ROLLESTON, Dr., Ely-place.

Also, Dr. DAY, Stafford, Dr. WOLLASTON, late of the Military Hospital, Scutari, and Dr. PEARSON, Ely, were admitted Extra-Licentiates.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Wednesday, December 24, 1856:—

BEACH, HENRY JOHN, Cheltenham.
BERESFORD, HERBERT, Chesterfield.
COCKELL, PHILIP WYATT, Royal Navy.
COLLINS, WILLIAM HENRY, Hereford.
HAYNE, WILLIAM REYNOLDS, Essex.
HINE, DANIEL BENJAMIN, London.
IRWIN, JOHN, Whitehaven.
ROWE, SAMUEL, Leicester.
SUTTON, HENRY GAWEN, Middlesbro' on Tees.
WAUGH, JOHN NEILL, Australia.
WINTERBOTHAM, LAURISTON, Cheltenham.

DEATHS.

CATHCART.—December 3, at Gortnamovagh House, near Garvagh, co. Londonderry, Martin Cathcart, Esq., Surgeon, late of the 7th Dragoon Guards, aged 73.

GOYDER.—December 19, at Spofforth, Charles Stones Goyder, Esq., M.D., aged 28, third son of D. G. Goyder, M.D., Norwich-road, Ipswich, formerly Resident Physician of the Gate Helmsley Lunatic Asylum, and Apothecary to the Glasgow Royal Asylum. M.D. Glasgow, 1850.

MITCHELL.—December 22, at Carisbrook, near Newport, Isle of Wight, Dr. Mitchell. He assisted at the post-mortem examination of Napoleon Bonaparte.

WARD.—December 21, at Forant, near Salishury, William Ward, Esq., Surgeon, not in Directory.

BEQUEST.

The late Miss Mann, of Lynn, has left to the Lynn and West Norfolk Hospital £200.

APPOINTMENT.

FARRINGTON DISPENSARY AND LYING-IN CHARITY.—At the last Special General Meeting of the Governors, Dr. W. R. Rogers was unanimously elected one of the Physicians to that charity, in place of Dr. Ballard, resigned.

DR. SOUTHWOOD SMITH.—A private meeting of noblemen and gentlemen has recently been held at Lord Shaftesbury's residence, to consider the best mode of testifying their personal esteem for Dr. Southwood Smith. The mode adopted was, to present a bust of Dr. Smith to some public institution, as a memorial of his services in promoting that course of legislative reform which has laid the basis of an administration to guard and improve the public health; the bust to be executed by Mr. Hart, the eminent American sculptor.

THE ABERDEEN UNIVERSITIES.—We believe it may now be announced that Government has concluded to send a commission forthwith to Aberdeen, to make inquiries with a view to a union of the two Aberdeen Universities during the next session of Parliament.

THE GENERAL HOSPITAL, BIRMINGHAM.—It is in contemplation to enlarge this building, by the erection of an additional wing at the west end.

ANOTHER MEDICAL MAYOR.—Dr. J. R. Beddome has for the fifth time, been chosen Mayor of the ancient borough of Romsey, Hampshire.

ACADÉMIE DE MÉDECINE.—M. Poggiale has been elected into the section of Pharmacy, after a very close contest. At the first balloting the numbers were—Poggiale, 26; Gobley, 25; Mialhe, 21: at the second, Poggiale, 26; Mialhe, 26; Gobley, 24: and at the third, Poggiale, 43; Mialhe, 31. It is said that the whole of the present Pharmacians in the Académie, 14 in number, voted for M. Poggiale. It is also remarkable that not one of the academical papers read on the occasion by these candidates for the section of Pharmacy was on a pharmaceutical subject; one treated of the bile, another of carbonic acid, and another of sugar; but all in their relations, not to Pharmacy, but to Physiological Chemistry.

TYPHUS FEVER IN ALLOA.—We (*Alloa Advertiser*) much regret to have to record the continued prevalence of typhus fever in our town. Out of the numerous cases of illness, there have been this week several fatal results—the rapidity with which death has followed the attack being in one or two instances somewhat alarming.

THE SUBSCRIPTION for the Testimonial to Mr. Sands Cox, of Birmingham, now amounts to between £600 and £700.

ROYAL EDINBURGH ASYLUM FOR THE INSANE.—On Christmas-eve there was in this large establishment a very extensive distribution of presents and prizes. Upwards of five hundred inmates were assembled in the hall, where were eight Christmas trees, bearing the richest fruits of the season, contributed by many of the benevolent commercial citizens. A very large amount of the gifts adorning the trees were the labour of the inmates. The impression on the inmates was of the most marked and salutary character. The Medical Officers, Drs. Skae, Howden, and M'Culloch, were perfectly satisfied with the results, as tending largely to meliorate the condition of their patients.

THE TRUSTEES OF THE BRITISH MUSEUM propose to appoint a Swiney Lecturer on Geology, in May. The office will be held for five years; the salary £144 a-year.

ENTERTAINMENT TO DR. JAMES BRYDON, OF EDINBURGH.—On Saturday evening last, the Junior Students of the Anatomical Class, Royal College of Surgeons, Edinburgh, entertained their Demonstrator, Dr. James Brydon, to a dinner in West Register-street. After the usual loyal toasts, the Chairman proposed the health of the guest of the evening, and, in the course of his remarks, referred to his distinguished career as a student, to the high position which he occupied on the list of those who have graduated at the University of Edinburgh, and also to the faithfulness, disinterestedness, and success, with which he now discharges his duties as demonstrator. The toast was drunk with all the honours—"Canon-gate time." Dr. Brydon replied in a clever and appropriate speech.

SUBSCRIPTION FOR THE WIDOWS AND ORPHANS OF THE FRENCH MEDICAL OFFICERS WHO DIED IN THE EAST.—Up to the 10th of December, the total amount of the subscription was 15,000 francs.

COLLEGE OF MEDICAL PROFESSORS AT VIENNA.—Professor Rokitsky has been chosen Dean of this body for the year 1856-7.

THE OBERMEDIZINAL COLLEGIUM AT VIENNA.—This body, attached to the Ministry of the Interior, and entrusted with the supervision of Medical affairs, especially jurisprudence, has just been reconstituted. It now consists of the following members:—The ministerial councillors, Drs. Well and Gobbi; Professors Rokitsky and Baron Wattmann; the Hospital Directors, Helm and Riedel; the Director of the Veterinary Institute, Dr. Roll; the President of the Surgical College, Dollmayer; and the Apothecary, Würth.

SUDDEN DEATHS.—Mr. James Fishwick, veterinary Surgeon, died very suddenly at his residence in Curzon-street, Oldham, last Thursday. This is the sixth case of sudden death which has occurred in the town during the week.

AN EPIDEMIC is said to be raging among the fish in Grand River, Michigan. The shores have been literally strewn with the dead and dying fish. Rats, snakes, and lizards also shared a common fate.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL.—The governors of this old-established charity propose to open the new hospital for the reception of patients at the commencement of the new year. This hospital was instituted in the year 1752, and was carried on, first, at a house near Tyburn turnpike, whence it was removed, in 1791, to Bayswater; but in consequence of bad management it had nearly ceased to exist, as far as any benefit the poor derived from it, when, in 1809, the attention of the late Duke of Sussex was called to the position of the institution, and at his suggestion an influential body of governors undertook the management of its affairs, under the patronage of her Majesty Queen Charlotte, and the presidency of his Royal Highness; and, in commemoration of the Jubilee, it was called "The Queen's Lying-in Hospital." From this period, up to the time of his death, the Duke of Sussex never ceased to take an active part in the affairs of the institution, and it was mainly by his exertions that it acquired the position of usefulness it has so long maintained. At the Duke of Sussex's death the late Duke of Cambridge undertook the duties of president, and ever exhibited as lively an interest in its welfare as his brother had, procuring the patronage of her late Majesty Queen Adelaide, and of her present Majesty, who is now patron. At Queen Charlotte's death it was named "Queen Charlotte's Lying-in Hospital." In 1810, the old Manor House of Lisson Green was purchased by the governors; but this house, never well adapted for a hospital, had become so dilapidated, and was so deficient in ventilation and proper drainage, as to be rendered no longer safe to be occupied by patients. In 1855 the governors were compelled to pull it down, and collected funds towards erecting a new building on the same site. They have completed a very plain but a very serviceable and well-arranged hospital, in every way adapted for the purposes for which it is required, containing all the latest improvements in ventilation, warming, &c. The hospital was designed by Charles Hawkins, Esq., F.R.C.S., and built by Mr. George Bird, under the superintendence of Mr. Philip Flood Page, architect. The history of the site on which it stands is somewhat curious. It was formerly part of the manor of Lilestone (now Lisson), containing five hides, and is mentioned in Domesday Book as among the lands in Ossulton Hundred given in alms. This manor afterwards became the property of the priory of St. John of Jerusalem, on the suppression of which, in 1548, it was granted to Thomas Heneage and Lord Willoughby, who conveyed it to the Duke of Somerset. On his attainder it reverted to the Crown, and was granted in 1564 to Edward Downing. In 1753 the manor was sold in lots, and a portion bought by John Harcourt, Esq., M.P., who lived in the Manor House. The old hospital was thus again (in 1810) dedicated to charity, as it formerly had been, as recorded in Domesday Book. In pulling down the old building it became evident that part of it was of a very ancient date, and in digging the foundations for the new buildings an old "Abbott's coin" was found. This hospital has always been "well officered," numbering among its medical attendants Dr. Denman, Sir Charles Clark, Bart., Dr. Locock, Mr. Blagden, Mr. Stone, and many others of professional distinction.

DISEASE IN CAVALRY HORSES.—A letter from Poona informs us that a very extraordinary disease has attacked the horses of the 14th Light Dragoons. It resembles the cholera in all respects. Many of the animals are violently purged in the first instance; others are seized with cramp, and die without being purged.

TANNIN AND GLYCERINE IN FISSURE OF ANUS.—Dr. Van Holsbek, considering the contraction of the sphincter as the effect and not the cause of fissure of the anus, directs his attention to the latter. He has treated with success several cases in which the fissure has persisted after the division of the sphincter by means of the following application: glycerine, 16, tannin, 1. A more or less voluminous tent is dipped into this and introduced into the rectum night and morning; and after a while the patient can do this for himself. It acts both by the topical influence it exerts upon the fissure, and by its compression, (its size being increased) at will, upon the constriction. In order to prevent a relapse, great care must be taken to obviate the occurrence of constipation for the future. —*Union Méd.* No. 142.

MORTALITY NOTABILIA.—The total number of deaths registered in London in the week that ended on Saturday is 1069, being very nearly the same as in the preceding week. In the corresponding weeks of the years 1846-55 the average

number of deaths was 1247; but the deaths of last week occurred in an increased population, and if they are to be compared with the average, the latter should be raised proportionally to the increase, in which case it will become 1372. It appears that the number in the present return is less by 300 than would have been returned if the average rate of mortality had prevailed. The deaths caused by diseases affecting the respiratory organs were considerably less than the average.

BIRTHS.—The births of 749 boys and 723 girls, 1472 children, were registered in London.

METEOROLOGY.—The mean height of the barometer in the week was 29.419 in. The reading fell from 30.33 in. at noon on Sunday to 28.76 in. on Thursday. The mean temperature of the week was 35.7°, which is 2.5° below the average of the same week in 38 years. The mean daily temperature was below the average on the last five days, and on the last three days the extent of depression below the average was from 7° to 10°. The highest temperature was 46.5°, and occurred on Sunday (the 21st); the lowest was 24.6°, and occurred on Friday. The range of the week was therefore 21.9°. The highest temperature on Thursday was only 31.2°. The mean dew-point temperature of the week was 32.9°, and the difference between this and the mean air temperature was 2.3°.

DEATHS IN PUBLIC INSTITUTIONS for the Weeks ending Saturday, December 20 and 27:—

	In the Week ending Dec. 20.			In the Week ending Dec. 27.		
	Males.	Females.	Total.	Males.	Females.	Total.
Workhouses.. .. .	35	45	80	41	62	103
Prisons	5	..	5	1	..	1
Military and Naval Asylums ..	3	..	3	1	..	1
General Hospitals	33	16	49	34	15	49
Hospitals for Special Diseases ..	8	3	11	5	..	5
Lying-in Hospitals	1	..	1	..	..	..
Military and Navy Hospitals ..	5	..	5	6	..	6
Hospitals and Asylums for Foreigners	1	..	1	3	..	3
Lunatic Asylums .. .. .	..	2	2	1	2	3
	91	66	157	92	79	171

DEATHS REGISTERED in the Metropolis for the Week ending Saturday, December 27, 1856.

		In the Week ending Saturday, Dec. 27, 1856.						Averages of Temperature and Deaths in 10 Weeks.
		Deaths of Persons.						
CAUSES OF DEATH.		AT ALL AGES.	Under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.	At 80 Years of Age and Upwards.	
Mean Temperature		35.7						38.8
ALL CAUSES		1069	487	142	179	187	46	1247.0
SPECIFIED CAUSES		1036	485	141	177	187	46	1235.4
DISEASES:—								
1. Zymotic Class		211	167	11	17	14	2	247.5
2. Dropsy, Cancer, and others of uncertain seat ..		36	3	3	11	16	3	51.1
3. Tubercular Class		165	50	76	31	8	..	168.4
4. Of Brain, Nerves, etc. ..		112	57	7	18	24	6	129.5
5. Of Heart, etc.		51	3	12	18	14	4	47.0
6. Of Respiratory Organs ..		233	112	7	43	60	11	261.2
7. Of Digestive Organs		58	15	9	18	14	2	64.4
8. Of Kidneys, etc.		21	1	5	9	6	..	13.2
9. Of Uterus; viz.—Puer- peral Disease, etc.		4	1	2	1	..	..	11.9
10. Of Joints, Bones; viz.— Rheumatism, etc. .. .. .		..	..	..	..	..	..	7.7
11. Of Skin, etc.		3	3	..	1	..	..	2.6
12. Malformations		2	2	..	..	..	..	3.0
13. Debility from Premature Birth, etc.		28	28	..	..	..	..	27.2
14. Atrophy		26	20	..	..	6	..	26.3
15. Age		40	..	..	..	23	17	54.9
16. Sudden		13	9	1	2	1	..	27.4
17. Violence, Privation, etc. .		33	15	8	8	1	1	82.1
CAUSES NOT SPECIFIED		33	2	1	2	..	..	21.6

THE following are the number of Deaths from Small-pox, Measles, Scarlatina, Hooping-cough, Diarrhoea, and Typhus, in the several Districts of London, for the past Week :—

	Popula- tion.	Small- pox.	Measles.	Scar- latina	Hoop- ing- Cough.	Dia- rrhoea.	Ty- phus.
West.....	376,427	2	7	4	6	3	6
North	490,396	..	9	5	12	4	4
Central ..	393,256	1	5	5	10	2	6
East.....	485,522	..	2	5	14	1	12
South	616,635	2	9	7	13	2	10
Total..	2,362,236	5	32	26	55	12	38

BOOKS RECEIVED.

- The Prostate Gland, and its Enlargement in Old Age. By D. Hodgson, M.D., etc. London. 1856.
- Dr. Clarke's Introductory Lecture at Harvard University. Boston. 1856.
- Muspratt's Chemistry. Part XXVIII. Glasgow. 1856.
- Remarks on Vesico-Vaginal Fistula. By N. Bozeman, M.D. Montgomery, 1856.
- The Physiological Anatomy and Physiology of Man. By R. B. Todd, M.D., F.R.S., and W. Bowman, F.R.S. London. 1857.
- Gluten Bread, and an improved Manufacture of Starch. London. 1856.
- Animal Magnetism. By A. Didier. London. 1856.
- On Thoracic Consumption. By J. C. Hall, M.D. Third Edition. London. 1856.
- Archiv für wissenschaftliche Heilkunde. III. Band. 1 Heft. Gottingen. 1856.
- The Great Law of the Human Mind. London. 1856.
- Braithwaite's Retrospect. July to December. 1856.
- The Liverpool Medico-Chirurgical Journal. January. 1857.
- The Visiting List for 1857.
- Nashville Journal. December. 1856.
- Psychological Journal. January. 1857.

TO CORRESPONDENTS.

ROYAL MEDICAL BENEVOLENT COLLEGE.
Cheltenham, December 23, 1856.

MY DEAR MR. PROPERT,—Will you be kind enough to inform me when and where the Special General Meeting of the Governors of the Royal Medical Benevolent College takes place, in order that I may, if practicable, be there, to give your Committee, and yourself in particular, my feeble support on that frivolous and vexatious question, the very moderate charge of £40 per annum, for the education, board, etc. etc. of the Exhibitioners.

Let those that are dissatisfied with such reasonable terms, reflect that if, through false economy, they refuse to strengthen the hands of your Committee, they must put up with an ill-paid and inferior class of teachers, and that the education of our sons will be second or third rate, instead of, as we all desire and hope, that their instruction shall be equal to the best of our public schools.

I quite concur in the sentiments of Mr. Stillwell, that "by kind consideration and liberal assistance to strengthen the hands, and cheer the minds of those so anxiously engaged in establishing and promoting the well-doing of so valuable an Institution," we shall simply be doing our duty to the rising generation.

I have much pleasure in accepting the terms of £40 per annum, and I trust that my youngest son, Owen Dalton, may be permitted to become an Exhibitioner immediately after the vacation.

I would also beg to propose, as a standing rule of your excellent Institution, that you follow the example of our excellent College, in receiving the Exhibitioners' fees for education in advance. On no account whatever permit the expenses to fall below £40 per annum, and by all means insist upon prepayments. I would suggest that £10 be paid quarterly in advance, for the convenience of all parties. At the Cheltenham College payments are made half-yearly in advance.

It is estimated by the parents of boys at our College that the entire expenses of board, education, stationery, travelling, and other expenses average £100 per annum.

Here, then, is a saving of at least one-half!

Pray make what use you like of my letters, and believe me, my dear Sir, to be amongst the members of our Profession who owe you a deep debt of gratitude.

I am, &c. WM. DALTON.

J. Probert, Esq.
P.S.—The expenses for board and education at the Swansea Grammar School are £64 per annum.

A Compiler.—No one but the author or his assignee has the right to publish original notes or additions to an old work, of which the copyright has expired. But any one can publish the old work without the notes or additions. A translation from either the dead or modern languages has been held to be copyright.

Mr. Allen.—The arsenic acid is more powerful and more rapidly poisonous than the arsenious, although the latter, from occurring in commerce, is by far the best known. Arsenic acid is prepared by adding nitric acid to arsenious acid.

Alpha.—The Executive body of the London Society of Apothecaries is the Court of Assistants, who fill up the vacancies in their number, as they occur, from the Livery of the Society. The Court of Examiners hold their office for one year only, and are elected by the Court of Assistants.

Dr. Pretty's case of post-partum hæmorrhage shall appear as soon as possible.

Mr. Morris.—Many thanks. Such acknowledgments from old subscribers are very pleasing.

Dr. Hall.—The papers on the Diseases of Artisans will be very acceptable,

Homunculus.—Mr. Quain's Lectures on Diseases of the Rectum appeared in our volume for 1852.

DIRECTORY ERRORS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In the compilation of so vast a work as the London and Provincial Medical Directory it is impossible to avoid errors creeping in, which are sometimes trivial and self-evident, at others apt to convey very erroneous impressions.

Might I therefore suggest, that a corner of your widely-circulated paper should be set apart for the correction of important misprints or transpositions, seeing that it is too late for any subscriber to correct an error in the work itself after receiving it.

In my own case, instead of "formerly Phys. Assist. U. C. H.," I am represented as "Assist. Phys.," which latter office I never had the honour of holding.

The insertion of the whole or such parts of this letter as are necessary to correct the error will greatly oblige,

Ventnor, Dec. 22, 1856.

R. NEALE.

[We shall be happy to insert such errata as our correspondent alludes to.—Ed.]

A BROAD HINT.

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APPOINTMENTS FOR THE WEEK.

JANUARY 3, *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; Westminster, 1 p.m.; King's, 2 p.m.; Charing Cross, 1 p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m.

ARMY MEDICAL AND SURGICAL SOCIETY, 8½ p.m.: Staff-Surgeon M'Grigor "On Some Recruiting Statistics."

ROYAL INSTITUTION, 3 p.m.: Juvenile Lectures—Professor Faraday—"Electric Attractions."

5. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.; Orthopædic Hospital, 3 p.m.

ENTOMOLOGICAL SOCIETY, 8½ p.m.

6. *Tuesday.*

Operations at Guy's, 1 p.m.

PATHOLOGICAL SOCIETY, 8 p.m. General Meeting for Election of Officers.

ROYAL INSTITUTION, 3 p.m.: Juvenile Lectures—Professor Faraday—"The Attractions of the Magnet, and their Modifications."

7. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m. Orthopædic Hospital, 3 p.m.

GEOLOGICAL SOCIETY OF LONDON, 8 p.m.

PHARMACEUTICAL SOCIETY, 8½ p.m.

ROYAL SOCIETY OF LITERATURE, 8½ p.m.

8. *Thursday.*

Operations at St. George's, 1 p.m.; Middlesex, 12½ p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.

HARVEIAN SOCIETY, 8 p.m.: Dr. Camps "On a Case of Irregular Intermittent Tetanic Catalepsy, with Remarks."

ROYAL INSTITUTION, 3 p.m.: Juvenile Lectures—Professor Faraday—"The way in which the foregoing Attractions are related to, and produced by each other."

9. *Friday.*

Operations at the Moorfields Ophthalmic, 10 a.m.; Westminster Ophthalmic, 1½ p.m.

ORIGINAL LECTURES.

A CLINICAL LECTURE

DELIVERED AT

University College Hospital.

By T. WHARTON JONES, F.R.S.

Professor of Ophthalmic Medicine and Surgery in University College, and
Ophthalmic Surgeon to the Hospital.

LECTURE I.

ON THE USES AND ACTION OF BELLADONNA IN
OPHTHALMIC PRACTICE.

GENTLEMEN,—Belladonna is an agent of the highest value in the treatment of various diseases, and especially in the exploration and treatment of certain diseases of the eye.

The forms in which you may see the drug most commonly prescribed at the Eye Infirmary are:—

1st, Belladonna lotion, to be used as a warm fomentation, composed of half a dram of the extract dissolved in eight ounces of water and filtered through linen. 2nd, Belladonna extract, of the consistence of honey, for painting over the eyebrows and outside of the eyelids. 3d, Solution of the sulphate of atropia, two to four grains to the ounce of water, for dropping into the eye.

The lotion is given to patients for use at home in cases of ophthalmia, in which there is great intolerance of light, and, in a large proportion of cases, it exerts a marked influence in relieving that distressing symptom;—it is also given in cases of iritis, for the purpose of opposing the contraction of the pupil. For this latter purpose, and also when it is desired to keep the pupil dilated after the operation of division of cataract or the like, the extract, reduced to the consistence of honey and painted over the eyebrow and eyelids, is also sometimes used. For these purposes, however, the sulphate of atropia solution dropped into the eye is in general more agreeable to the patient. When we want to dilate the pupil for the purpose of exploring the interior of the eye, a drop of the solution of the sulphate of atropia is applied to the conjunctiva, and the effect is obtained in about ten minutes.

It is to be observed that belladonna, even in its external application, requires to be employed with precaution.

When we prescribe belladonna internally it is usually either in the form of the powdered leaves or in that of tincture.

We are in the common habit of ordering, and generally with good result, one or two grains of the powdered leaves with two or three grains of hydrarg. c. cretâ twice a-day for two or three days, at the commencement of the treatment of scrofulous ophthalmia and scrofulous corneitis, in which, as I have mentioned, we also order the belladonna lotion to the eyes.

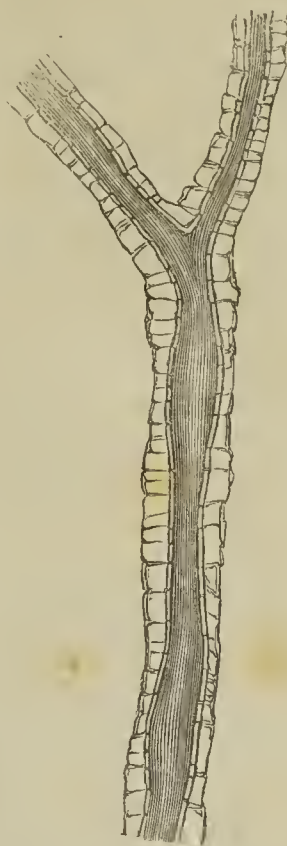
The tincture of belladonna we give in doses of about ten drops to grown-up persons, to relieve neuralgic pains about the eye, and even the pain attendant on internal ophthalmia, which it sometimes does relieve in the most astonishing manner.

In a case, for example, to which I shall by-and-by refer, a paroxysm of pain was almost instantaneously relieved every time a dose was taken.

Of course, if it is necessary to observe caution in the external use of belladonna, it is still more so in its internal use.

The great therapeutic value of belladonna, as well as its dangerous qualities in an over-dose, which I have thus glanced at, makes it, you will acknowledge, worth some pains to study its mode of action on the system. In reference to this point, therefore, I beg your attention to the following observations:—

In the course of my researches on the state of the blood and the blood-vessels in inflammation, I found that the application to the frog's web of a solution of the sulphate of atropia (four grains to the ounce of water), was followed by constriction of the arteries of the part in about the same time that dilatation of the pupil supervenes on the dropping into the eye of the same solution.



This figure which I show you represents an artery of the web of a frog, thus constricted by the action of the sulphate of atropia.

The application of a stronger solution of atropia was followed by a still greater degree of constriction of the arteries. And the effect of this constriction of the arteries on the flow of blood in the web was partial congestion in the capillaries and venous radicles.

As the constriction of arteries is owing to contraction of the circular fibres composing their muscular coat, it follows that the *modus operandi* of the atropia in this case must be to excite the contraction of those fibres.

In first recording the observation which I have now mentioned, in my Essay "On the State of the Blood and the Blood-vessels in Inflammation," published in 1850, I identified the action of atropia in exciting contraction of the circular fibres of the muscular coat of the arteries, with its action in exciting dilatation of the pupil; which action I considered to be by causing contraction of the radiating fibres of the iris. This

opinion I had previously enunciated in my "Principles and Practice of Ophthalmic Medicine and Surgery," (1st Edition, published in the beginning of the year 1847,) to the effect that, considering the state of relaxation of the iris is that in which the pupil is neither much contracted nor much dilated, as I had many years before insisted, and that contraction and dilatation of the pupil are manifestations of an active state, the former of the circular, the latter of the radiating fibres of the iris, it is to be inferred that the action of belladonna in producing dilatation of the pupil consists in calling forth, through the medium of the ganglionic system, the contraction of the radiating fibres. These fibres, it is to be remarked, differ from the circular fibres, being immediately under the influence of the ganglionic system."—P. 95-6.

The passage now quoted was, in the first edition, followed by a conjecture that the action of belladonna on the arteries consists in determining contraction of their walls, they being like the radiating fibres of the iris under the influence of the ganglionic system. I had in view the fact, long before known, that section of the sympathetic in the neck is followed by contraction of the pupil, and vascular injection of the eye.

In the second edition (published in 1855, that is, after I had become convinced, by direct microscopical observation, of the constricting effect of atropia on the arteries,) the same passage occurs, and is succeeded by the remark, that "This action of belladonna in dilating the pupil, [by exciting contraction of the radiating fibres of the iris,] is analogous to that which I have found it to possess of determining constriction of the small arteries of the frog's web; their circular fibres being, like the radiating fibres of the iris, under the influence of the ganglionic system."—P. 27.

Leaving for the moment the consideration of the action of belladonna on the pupil, let us endeavour to trace its constricting action on the small arteries, as visible under the microscope, in those more palpable phenomena which are evidences of its operation on the system.

To take first the appearances presented by the conjunctiva from the use of atropine solution as drops for the eye.

A gentleman, one of your fellow-students, affected with cataract, occasionally used, on my recommendation, drops of a solution of atropia for the purpose of dilating the pupil, in order to improve the sight, until it should be considered proper to operate.

The use of the atropia, though it improved the sight, always induced such congestion of the conjunctiva, that I considered it proper eventually to recommend its discontinuance. The opacity of the lenses having now considerably increased, the discontinuance of the dilatation of the pupil by the atropia necessarily left the gentleman much inconvenienced by the

defective sight. The operation was, therefore, had recourse to, first on one eye, and, as soon as the sight was restored in it, on the other, which is now convalescent. But it is not of the operation I wish to speak just now; it is of the congestion of the conjunctiva induced by the atropia drops.

Taught by my microscopical observation of the action of atropia applied to the frog's web in causing constriction of the small arteries, and consequent congestion of red corpuscles in the corresponding capillaries and venous radicles, I viewed the redness of the conjunctiva in this case as the effect of constriction of the small arteries, induced by the contraction of their circular muscular coat excited by the action of the atropia.

When the use of the atropia was discontinued, the conjunctiva recovered its natural paleness.

In cases in which belladonna has been taken in poisonous doses, we behold still more striking marks of constriction of the arteries. For example, the small pulse, the dryness of the mouth and throat, the paleness succeeded by the flushing of the face, the blue injection of the conjunctiva, the coldness and cold sweats.

The small pulse speaks for itself. The dryness of the mouth and throat, which is commonly so early a symptom, no doubt arises from the constriction of the vessels of the mucous membrane of the fauces, and consequent diminution of its secretion. Atropia dropped into the eye is sometimes followed by a dryness in the throat, from its having passed thither by the lacrymal passages.

The paleness of the face arises from the impeded access of blood by the constricted arteries; but gradually red corpuscles accumulating in the capillaries and venous radicles in consequence of the diminished *vis a tergo*, the paleness is succeeded by the flushing of the face.

The blue injection of the conjunctiva is due to the same cause as I have already explained.

The coldness and cold sweats are owing to the general venous congestion.

To the general venous congestion dependent on the constriction of the arteries, may also be ascribed the cerebral symptoms—the diminution or loss of muscular power, &c.

Whilst in the course of my researches on the state of the blood and the blood-vessels in inflammation, I found that the application to the frog's web of a solution of the sulphate of atropia was followed by constriction of the arteries of the part and stagnation of blood in the corresponding capillaries and venous radicles, I found that the application to the frog's web of certain other agents produced a contrary effect, viz. dilatation of the arteries and a brisker flow of blood, and the dissipation of any congestion which may have existed at the time. The agents referred to are what are commonly called irritants or stimulants. Those which I principally used in my experiments were a solution of sulphate of copper (gr. xvj. ʒj.) with vinum opii (ʒj),—or vinum opii alone,—or Battley's liquor opii,—or spirit of wine.

The primary effect of these and such like irritating or stimulating applications was constriction of the arteries, but that was only momentary, being quickly followed by dilatation. Often the dilatation was unpreceded by any constriction.

As constriction of arteries is owing to contraction of the circular fibres composing their muscular coat, dilatation of arteries must necessarily be owing to relaxation of the same fibres. It follows that the *modus operandi* of the agents I have mentioned must be the contrary of that of belladonna.

This I found by direct experiment and microscopical observation to be the case; thus:—

An artery of the frog's web was noted, under the microscope, to be varicosely constricted, almost to obliteration, after the application of atropia to the web. The blood was no more than flowing in the vessel, when I applied Battley's liquor opii. The effect was full dilatation of the artery, and brisk flow of blood. In another case, sulphate of atropia solution having decidedly determined constriction of the arteries and partial stagnation, the sulphate of copper solution, with vinum opii, was applied, and caused dilatation of the arteries, with briskness of the flow of blood, but not to so great a degree as in cases where no atropia has been previously used.

On the other hand, I have remarked that arteries which have been caused to dilate by the application of Battley's liquor opii, or the solution of the sulphate of copper with vinum opii to the web, may be made to contract again by washing away those substances, and applying atropia instead.

What is the effect on the pupil of irritating agents such as those I have mentioned, dropped into the eye?

Contraction.

But is the contraction owing to relaxation of the radiating fibres of the iris, or to contraction of the circular fibres?

I shall return to this question. Here I mention the fact that the pupil is caused to contract by the very agents dropped into the eye, which may at the same time have the effect of removing congestion of the conjunctiva by inducing relaxation and dilatation of the small arteries, the constriction of which had led to the congestion. Having shown by microscopical observation and experiment, that the action on the arteries of certain substances commonly called stimulants, is antagonistic to that of belladonna, and having read in that action the dissipation of congestion of the conjunctiva, whether induced by the action of belladonna or by the action of cold as in catarrh, let us now ask, what are the agents which have been found to operate as antidotes to the poisonous effects of belladonna?

The answer is, stimulants, diffusible stimulants such as ammonia, brandy, etc., the very agents which, when duly applied, cause dilatation of the arteries, and a free circulation of blood.

Although belladonna has the effect of inducing constriction of the arteries and consequent congestion, it appears to exert an influence in relieving inflammation of a certain kind. For example; the irritable inflammation of the erythritic form of scrofulous ophthalmia, in which the visible vascular injection is in small proportion to the functional disturbance.

This brings me to consider that kind of inflammation of the eye induced by section of the sympathetic in the neck.

The occurrence of inflammatory congestion of the eye after section of the sympathetic in the neck, which had been previously long known, I attributed (in the first edition of my "Principles and Practice," 1847; p. 324, § 1613) to paralysis of the walls of the blood-vessels of the eye; and in my essay on the state of the blood and the blood-vessels in inflammation, published in 1850, an effect of section of the ischiatic nerve in the frog is stated to be dilatation of the arteries, and a fuller and more rapid circulation of the blood in the web. Pp. 12-20, 31-39.

To give an example:—The ischiatic nerve of the left leg of a frog being divided, the arteries of the web were found on examination dilated, and the stream of blood in them fuller and more rapid. The blood in the capillaries and veins especially appeared to be unusually loaded with red corpuscles. The general effect to the naked eye was increased redness of the web.

In 1852, in repeating the old experiment of cutting the sympathetic nerve in the neck of a cat or rabbit, M. Bernard, of Paris, discovered, in addition to the effects previously observed that there supervened increased redness and heat of the ear and side of the head.

It had been shown in 1846 by Dr. Biffi that when the pupil had become contracted after section of the sympathetic in the neck, irritation of the nerve above the section excited dilatation of the pupil.

In like manner it occurred to Dr. Brown-Séquard, that irritation of the sympathetic would cause constriction of the blood-vessels of the head, which had become dilated, as discovered by Dr. Bernard, in consequence of section of the sympathetic. Accordingly, on performing the experiment of galvanizing the sympathetic in the neck above the section, Dr. Brown-Séquard found the increased redness and heat were for the time diminished, in consequence of the contraction of the vessels which are under the influence of the sympathetic.

In a paper in the "Medical and Chirurgical Transactions" for 1853, I inferred, from my previous observations and experiments, that the vessels especially acted on in these cases are the arteries, for the walls of the capillaries are not contractile, nor are the walls of the veins materially so, except in the bat's wing, in which I have discovered they possess the extraordinary endowment of rhythmical contractility, like the heart.

In order to determine by direct microscopical observation, that it is in consequence of the section of the sympathetic fibres contained in the ischiatic nerve that the dilatation of the arteries takes place after section of the ischiatic nerve in the frog, and not of section of the proper spinal fibrils of the latter nerve, I performed the following experiment:—

I laid open the lower part of the vertebral canal in a frog, and removed the roots of the nerves supplying the posterior extremities, together with the corresponding portion of the spinal marrow. On then examining the webs under the microscope, I found that the arteries, so far from being dilated, appeared rather disposed to be constricted.

After this I divided the ischiatic nerve on one side, as high up in the thigh as possible, and the result was that the skin of the extremity subjected to the experiment became, even to the naked eye, redder from vascular injection than that of the opposite extremity; and on examination of the web under the microscope, the arteries were found considerably dilated, though they were not wholly deprived of their contractility.

In the cases of ophthalmia I have referred to, in which belladonna so often operates beneficially in relieving not only the intolerance of light but also the inflammation itself, it appears to me probable, when I consider the kind and degree of vascular redness of the conjunctiva and the course of the disease, that there is not congestion and stasis, as in other cases; but, on the contrary, a dilated state of the arteries and an accelerated flow of blood, as after section of the sympathetic—a condition, we have seen, that the special action of belladonna on the arteries would be calculated to counteract.

At my next lecture, I shall enter into the special consideration of the action of belladonna in causing dilatation of the pupil.

ORIGINAL COMMUNICATIONS.

SERIES OF CASES ILLUSTRATIVE

OF

DISEASES OF THE ABDOMEN,

AND ESPECIALLY OF THE DIAGNOSIS AND TREATMENT OF ABDOMINAL TUMOURS AND INTUMESCENCE.

By CHARLES J. HARE, M.D. Cantab., L.R.C.P.

Assistant-Physician to University College Hospital, etc.

HYDRONEPHROSIS.

A female, aged 38, first began to have pain in left loin when 12 years old, and suffered from it for some years. At age of 28, pain attacked right side of abdomen and that loin; and, with the exception of one year, she was seldom afterwards free from pain. At times the pain was very severe, and then a large tumour was felt on right side of abdomen, which subsequently disappeared; the tumour appeared and disappeared on several subsequent occasions. In 1855 a large tumour was also discovered in left side of abdomen; this afterwards disappeared. Death, with symptoms of uræmic poisoning. On post-mortem examination very considerable double hydronephrosis was found; the right kidney and its pelvis distended, the left almost empty.

As few cases of disease present more points of interest than those of abdominal tumours, I propose in the following series to give the details of some cases which have come under my care; and I trust, in this manner, to aid somewhat in elucidating a class of affections the diagnosis of which, while a matter of great importance, is often one of extreme difficulty.

Mrs. M., aged 38 years, came under my care, as an outpatient of University College Hospital, in December, 1854, and on January 3rd I obtained the following notes and history of her case:—She was of middle stature, and rather thin; she had never been stout, but was formerly somewhat more so than when I saw her; she was free from œdema of any part; was rather pale; the complexion a little dusky, but not sallow; darkish around the eyes; hair brown. She had formerly been a servant in good situations; had been married, in comfortable circumstances, about thirteen years, but had never been pregnant. Was born of very healthy parents, and her brothers and sisters had likewise enjoyed good health. She was delicate during childhood; had measles, but not scarlet fever, though exposed to the contagion of it by being in the house when her brothers and mother suffered from it.

When about 12 years old she first began to feel pain in the left latero-lumbar region; it varied much in degree; was sometimes severe, and sometimes very slight; always relieved

entirely, at least for a time, by sleep; it continued, off and on, till she was eighteen. When 16 years of age she was told by a Medical gentleman, who, however, only examined the abdomen through the clothes, that she had "a tumour on the spleen;" some ointment was prescribed, and the part was to be washed with bay salt and water; she believes that she was also slightly salivated. She improved decidedly, though she did not entirely lose the pain for two years afterwards.

About ten years before she came under my care she first began to suffer from pain in the right side of the abdomen, and at times had suffered in that region up to the period of my seeing her; but once she was twelve months together free. The pain was generally acute, unaccompanied with shiverings; it was chiefly in the right loin, and most acute there, but it likewise extended towards the right groin: when present she was unable to lift the right leg without great suffering; it often lasted twenty-four hours, and obliged her to go to bed and have fomentations applied. The attacks had been more frequent than formerly for some time prior to my seeing her; she had had four or five since June preceding, and two in the month of December. Very generally when free from the "attacks," she suffered from a dull heavy pain or sensation in the back. The order of occurrences during one of the attacks was usually, she described, as follows:—A sensation of numbness, or a dead heavy pain is felt on the right side of the abdomen, between the anterior-superior-spinous process of ilium and the umbilicus, and on placing her hand there she feels a hard, resisting lump, rather tender on pressure. In an hour or two the pain extends to the right loin, where it becomes much more severe than in the part where it is first felt. The pain is intensely dragging, not of a stabbing or cutting character; it does not extend to the left side of the abdomen. At the time when the pain in the loin becomes so bad, she feels a swelling (on applying her hand) just under the right costal cartilages, a little to the outer side of the nipple line; her impression being, from the sensation communicated to the hand, that the two swellings (the one near the anterior-superior-spinous process and the one just referred to) are distinct from each other. Fomentations are usually applied, and with relief. The attack may subside gradually in twenty-four hours or so; but more frequently it ceases suddenly; and in either case the relief is coincident with her passing a large quantity of urine.

She stated that the "lumps" sometimes continued after the pain had diminished, but, even then, they either entirely disappeared in a day or so afterwards, or diminished so much that she ceased to notice them. When the attacks of pain came on in the afternoon, the diuresis often occurred during the subsequent night. The urine was always very clear, and indeed she had never observed it to be thick, even when she was suffering from a cold, for years past, nor had there ever been, she said, any appearance of blood in it.

At the time when I saw her she was not suffering from one of her severe attacks, but she applied for advice in consequence of the aching pain which she so frequently felt in the right loin. On examining the abdomen, I found no particular emaciation, but not much fat under the integuments; the parietes were moderately flaccid; there was no apparent difference in the symmetry of the two sides during medium respiration and but little on deep expiration; the right side then, however, appearing to be slightly less depressed than the left, and there was a barely perceptible fulness in the latero-lumbar region of the same (right) side. On percussion almost the whole abdomen was fairly resonant; there was a little, but by no means complete, dullness for about a finger's breadth or a little more, below the right costal cartilages in the liver-region; on the right side, too, in the latero-lumbar region there was some dullness on percussion, extending backwards towards the spine and slightly forwards into the outer part of the antero-lumbar region; the limits of the dull stroke-sound were not very well defined, as the dull sound gradually passed into the more resonant sound of the rest of the abdomen. On palpation it was found that there was a hardish resisting mass occupying the part dull on percussion; its anterior border, which was somewhat convex and extended from the costal cartilages (at the line of the anterior border of axilla) to the crista ilii, was overlapped by intestine; the tumour was rather hard; no distinct proof of fluctuation at any part of it could be obtained; it was somewhat moveable when the hand was pressed against it at the postero- or latero-lumbar region. There was no tumour detectible in the

corresponding region of the left side, nor, indeed, in any other part of the abdomen, so that no trace of the second "lump" or swelling, which she described as being sometimes felt during her more severe attacks of pain, was found.

The accompanying copy of a diagram which I took at the time will better show the position and size of the tumour than a mere verbal description.

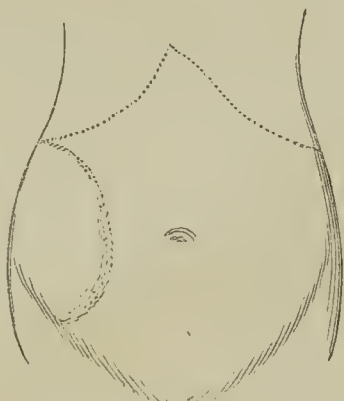


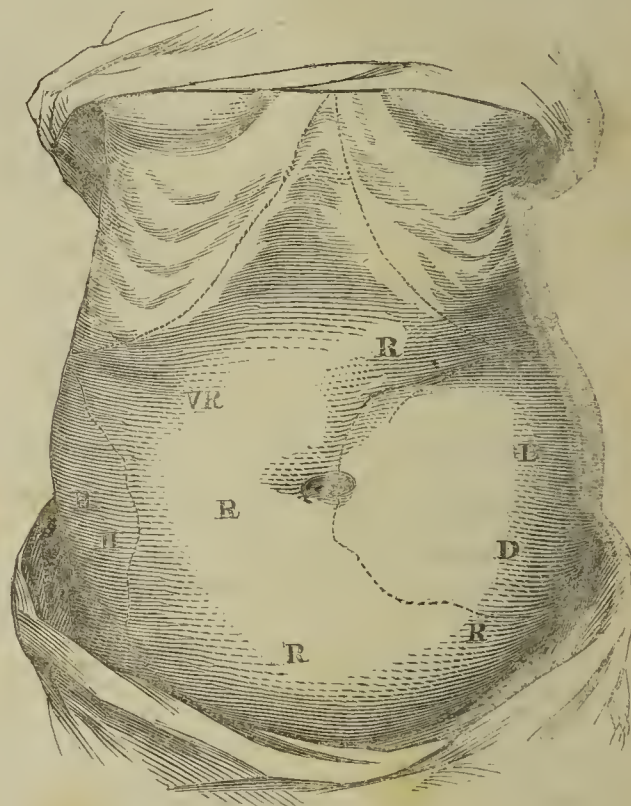
Diagram (Jan. 3, 1855) showing the position and size of the tumour; the dotted line marks the extent of the tumour as determined by pressing the fingers deeply into the abdomen; its apparent breadth, on superficial palpation, was about three-fifths of the above.

She was ordered to have warm baths and such counter-irritants as mustard poultices, &c., to the right loin and the abdomen, and subsequently an embrocation consisting of tincture of aconite and linimentum opii; the bowels were regulated, and some tonics administered. The pains diminished, but she again applied to me in the August following, when similar means and the exhibition of the *Mistura Ferri* again relieved her and improved her strength. I recommended her also to go into the country, and she went to the Convalescent Institution at Walton-on-Thames. Here, for a fortnight, she felt "quite well," except from constipation, for which she had some medicine; but on Thursday evening, September 6th, she was attacked with severe pain in the right loin and the part of the abdomen just anterior to the anterior-superior spinous process of that side, the pain being of the usual heavy, dragging character; could not rest in any position; slept scarcely at all; at the same time she found some fulness in that part, which gradually increased. Some brisk aperients were ordered, which acted well, but the intumescence increased; and it was not until Monday, the 10th, that she mentioned to Mr. Mott the condition of her abdomen, who then found a large and hard swelling occupying the space between the crista ili and umbilicus, similar to what, she assured him, she had had beforetimes, but which had afterwards disappeared. On the 11th, she began to have pain in the left side of the abdomen, and in that loin, (she was now confined to bed,) and a somewhat similar swelling to that on the right side appeared likewise on the left side, but it was not nearly so hard, and not so large. On her return home the next day, she suffered much from the jolting of the omnibus and cab, and she was able to use the right leg very little, owing to the pain which moving it caused in the abdomen. After her return she was confined much to bed, and for a fortnight did not leave the house at all. During the time she had the pain so severely at Walton, and for a week or more after her return, she passed very little urine, when suddenly she voided a very large quantity, and felt immediate relief from the pain, and the tumour of the right side almost entirely disappeared.

She came to me on October 16th, having much less pain than she had previously been suffering from, and complaining chiefly of weakness. On examining the abdomen I found some very remarkable differences from what I had met with in the January preceding, both in its general appearance and in the other physical signs. It was now unsymmetrical, the left half being decidedly larger and more prominent than the right; chiefly so in the latero- and postero-lumbar regions, but also even in the left side of the epigastric region; in these parts there was dulness on percussion, not, perhaps, absolute at all parts, but very considerable; the rest of the abdomen was resonant, except a resisting part near and above the right antero-superior spinous process of the ileum. This mass, which felt hard when manipulated, occupied less space transversely than when before examined; that is, it extended less

into the antero-lumbar region—but its vertical measurement had altered but little. The tumour on the left side was somewhat oval, or nearly circular in form, extended upwards to the false ribs, inwards to the umbilicus, and downwards to fully two inches below the level of the umbilicus. Its position was evident both when the patient was lying down and when she stood up; the intestines overlaid and masked part of its circumference. It appeared to extend into the postero-lumbar region, but that part of the tumour was not easily definable; it was resisting to pressure to a decided amount, yet not absolutely; it had a certain degree of elasticity; was only a little tender on manipulation. The urine was stated to be clear; bowels moderately open; pulse 92.

I took the following drawing of the abdomen on this occasion, which shows the general prominence of the left side, and also, by the dotted lines, the extent (as determined by percussion, palpation, etc.) of the tumours as they then existed.



October 16, 1855.—General fulness of left side of abdomen, especially its upper part. The dotted lines indicate, respectively, the margins of the costal cartilages and the right and left renal tumours; the short inner dotted line at upper part of left tumour indicates point where intestine began to overlap the tumour. D, D, dull on percussion. H, H, hard and dull. R, R, resonant. VR, very resonant.

I prescribed some aperient and other medicines for her, and saw her again on November 6th, when her appetite was better, but she was palish and rather weak; she stated that she had some pain across the loins, especially the right one, but that the large tumour in the right side, previously described, had not reappeared; the one on the left side remained much as when I examined her on the 16th. She was put on a course of cod-liver oil, and I did not see her subsequently, but I afterwards ascertained from an intimate friend of hers that she felt pretty well for eight months, and was able to get about, but still suffered from lumbar pains. I was not able to ascertain when the left renal tumour disappeared, but about June last she had one of her "attacks," from which she recovered as suddenly as before; and another about three months before her death, for which Mr. Barfoot was called in to attend her. He has kindly furnished me with some particulars of her case while under his care; and it appears that then no tumour was discoverable on the left side of the abdomen, while there was a very large one on the right side, extending to or even beyond the median line. He confirms the statement made relative to former attacks by the patient herself (who was a very intelligent woman), that the sensation communicated to the hand applied to the abdomen was exactly that of two tumours on the right side, one near the costal cartilages, the other near the umbilicus; or, at least, of one divided by a very marked hour-glass-like contraction about its middle. This attack ceased suddenly

with the usual phenomena of profuse diuresis, for she had passed, she said, during the night, "a chamber-pot full of urine," and on subsequently examining the abdomen the tumour was found to have diminished "to the size of an orange." She again came under Mr. Barfoot's care on October 2nd, but the attack again ceased suddenly on the 13th. This time, however, the urine passed presented a very different appearance from what it had done on previous occasions, for it was of a dark colour, like coffee-grounds, and though it was not examined microscopically, Mr. Barfoot had no doubt of the presence of blood. Some urine tested during her previous illness was free from albumen. In this, as in all her other attacks, during the continuance of the severe pains and the increase of the abdominal tumour, she had passed very little urine, sometimes none for a day or two, and then only a few tablespoonfuls a-day. She did not long remain free from her symptoms, for they recommenced on October 22nd, with pain, retention of urine, &c.; she now also vomited a good deal, and two or three times during the attack Mr. Barfoot thought he detected a slightly yellowish or jaundiced tint of the skin. For the last two or three days of her life the vomiting was very frequent. She was very drowsy and sleepy, and occasionally wandered, but only slightly. On Sunday, November 2nd, she was attacked with slight convulsive movements, (twitchings or clenchings of the hands, the mouth drawn to one side, &c.) and these continued to recur for a few minutes, four or five times a-day; but she never, at any time, entirely lost her consciousness up to the period of her death, which took place on November 6th. During the attack the urine passed never amounted to above an ounce or two in the twenty-four hours, and some days none whatever was voided. The tumour on the right side of the abdomen was very large, while none was detected on the left.

(To be continued.)

ON THE COMMUNICATION OF SYPHILIS FROM THE FŒTUS TO ITS MOTHER.

By JONATHAN HUTCHINSON,
Surgeon to the Metropolitan Free Hospital.

(Concluded from page 617, Vol. XXXIV.)

ALTOGETHER different, however, is the course of things when constitutional syphilis is communicated by the fœtus. Here we find no violent outbreak of a specific disease in its several and peculiar stages, but the blood of the mother seems rather to have become quietly, and, as if by transfusion, assimilated to that of the father whose child she is carrying, and liable to produce just the same morbid phenomena. The quantity of poison communicated is also of the greatest consequence. A small dose produces little or no visible effect, and a larger or repeated one causes effects which, *cæteris paribus*, will exactly correspond with its quantity. Thus women who during a first pregnancy by a syphilitic father will merely fall into ill-health, but suffer no specific symptoms, will, on a second or third pregnancy, become yet more cachectic, and show unmistakable evidences of the disease. It is, under such circumstances, often very interesting to note the effect of the maternal contamination reflected back upon her offspring. The first children had but one diseased parent, the later ones have two, and very often the influence of this is remarkably shown. A woman of vigorous constitutional power will bear to a syphilitic father children which, in virtue of the sound element contributed by herself, show little, if any, evidences of disease. She herself, however, while doing so, becomes contaminated, and at each succeeding pregnancy is less and less able to protect her offspring, until at length she also communicates to them a poisoned food, and then ensue either a series of abortions, or infants born to suffer from severe forms of hereditary syphilis. Nor does the circumstance, not unfrequently observed,—that the elder children of a family suffer most from hereditary syphilis, and the eldest most of all,—in any way militate against the authority of this law, since the seeming exception is caused by a different and conflicting one. This happens in those instances in which both parents are of robust constitution, the mother able to resist the contaminating influence, and the father rapidly getting rid of his taint, —throwing it off, as it were. It is well known that, in the

robust, constitutional syphilis does die out of itself in course of time, though I suspect that, as a rule, this takes place much less quickly than is generally supposed.

It has been already remarked, that one of the most trustworthy reasons for believing that the cases which are the subject of this paper had never had any form of primary syphilis is, that very few of them had ever shown any secondary symptoms. In but 9 out of the 50 cases had any of the phenomena characteristic of the secondary stage ever occurred, and in 2 of these it was very questionable whether they had done so. In a very large proportion indeed tertiary symptoms only were observed. The explanation of this is obvious from what has just been said. The form produced in the mother is identical with that of the father, and in almost all cases the latter had passed through both primary and secondary stages before marriage, and was at the time he begot the contaminating children the subject only of a latent constitutional taint, or of affections belonging to the later of the tertiary class, such as sore tongue, palmar psoriasis, nodes, etc.

Having thus examined the evidence, which appears to me to make it in the utmost degree improbable that these patients had contracted syphilis in the ordinary way, we will now pass to examine the group of symptoms usually present, and then glance at the question, Is it possible that they could have been derived from any other source than contamination by pregnancy? Assuming, however, as I fear the Society will think I have repeatedly done, that the question submitted to their consideration is already proven, I will for convenience' sake designate them the

SYMPTOMS OF SYPHILIS CONTRACTED FROM THE FŒTUS.

A *peculiar cachexia* must rank first in importance as in frequency among these. A pallid, earthy complexion, loss of flesh, debility, great depression of spirits, and liability to aching pains in the bones, etc., on taking cold, are its chief features, and with these are generally produced one or more of the specific affections about to be mentioned. Cachexia is, however, not unfrequently produced without any specific accompaniments, especially in those who have conceived but once, or whose own powers are vigorous enough to enable them to resist to a great extent the influence of the poison. In such the patients will assure you that prior to marriage they were the pictures of health, and never knew what it was to be ailing; but that since they first fell pregnant they have been always ill, have lost their complexions, and become weak and low spirited. Out of 68 women who had borne syphilitic children, but none of whom there was reason to believe had ever had primary syphilis, I find that but 25 per cent., or 17 of the whole, escaped showing one or other indication of contamination; and in 14 cases cachexia of the kind described was the only morbid phenomenon which had been produced. Of the 50 patients in this list who were believed to have contracted specific symptoms from pregnancy, 23 had marked and severe cachexia, 14 had it in a less severe form, and 12 appeared to be in good general health.

Leucorrhœa in degree of frequency should be next mentioned, but the difficulty of pronouncing with any certainty respecting a symptom of such very common occurrence, when it is specific and when not, prevents its being regarded as of so much importance at it otherwise would. Leucorrhœa was present in 18 out of the 50 cases, or 36 per cent. It had been profuse in very many instances, and of the greenish colour and disagreeable odour which some writers have deemed, falsely, I think, to characterise it as of specific nature.

Loss of hair is a very common sign indeed of constitutional syphilis, especially in women. It had occurred to such an extent as to be noticeable in 24 per cent., or 12 out of the 50. The loss usually consisted in a general thinning over the whole scalp, and often included the eyebrows also. It was very frequently observed to occur in connexion with every pregnancy, either before or after delivery. Although not at all infrequent after delivery and during lactation among delicate women quite free from syphilitic taint, yet I feel certain that it is out of all proportion more common among those who have carried diseased fœtuses.

Sores on the tongue had been present in 22 per cent. of the cases, generally of a slight and transitory character, but often leaving behind the white markings so suggestive of syphilis. Excepting in one instance, in which the tongue was covered with condylomata, I have not seen the more severe of the

syphilitic affections of that organ in connexion with the disease derived from foetal contamination. In none, for instance, were there the deep fissures or indurations which are sometimes seen in other cases. In several instances I have known white margined sores on the tongue to appear during several successive pregnancies.

Fissures at the angles of the mouth, and sores in the linings of the cheek are of frequent occurrence, having been present in 16 per cent. to such an extent as to be of pretty certain diagnosis.

Eruptions.—I have only seen those which I should consider as of the secondary class in 4 instances; in 5 others, however, the patients stated that they had had a general rash over the whole body at a former period, which there was reason to suspect must have been of that class. Of the tertiary ones, psoriasis about the face occurred in 4, psoriasis palmaris in 4, indolent tubercles in 4, serpiginous cicatrising sores in 5, tinea tarsi in 3, erythema in 1, lichen in 1, condylomata in 4, fissures of nipples 1, ulcers on the leg 1. Liability to sore throats on taking cold was mentioned by many of the patients, and 4 of them from their history appeared to have had genuine secondary disease of the pharynx and tonsils. In 1, condylomata were scattered over the pharynx, and in 2 the velum palati had been entirely destroyed by phagedenic ulceration.

Nodes.—Actual nodes had existed in 12 per cent. In a large proportion there had been liability to pain in the bones, doubtless of periostitic origin, on slight colds, etc., and in many of these the nocturnal character of the pain had been well marked.

Proneness to Abort.—The influence of the syphilitic virus as destructive of foetal life had not been manifested in any large proportion. In case No. 7 many miscarriages at early periods were stated to have occurred, but the woman had borne no living children. In case 26 three abortions occurred within the first two years of marriage. But these are decidedly exceptional to a general rule, as a glance down column four of the report will show. The frequency of abortions in cases in which the mother has herself been the subject of primary disease is well known, and the comparison between such and the present class is very instructive. In these, it is to be borne in mind, that the foetus derives its morbid constitution from but one parent, and, in all probability, from one who himself has nearly worn out the tendency. It is evident that a foetus begot by a father who suffers only from constitutional taint, and nourished in the womb of a mother who is healthy, excepting inasmuch as she may have received contamination from itself, has a very good chance of life. And here let me mention a speculation to account for the fact, that a vast majority of syphilitic infants are born healthy-looking, and show no signs of disease until from a week to a fortnight old. This circumstance for long puzzled me exceedingly, and I never recollect to have seen any attempt to explain the difficulty. Ought not the solution to be found in the circumstance, that in a vast majority of cases the mother is healthy and the father only diseased? Receiving, therefore, while in utero, an abundant supply of well-elaborated nutriment, the foetus lives and thrives, there being no need for the exertion of its own organs of assimilation. But after birth it loses this privilege, and with a constitution enfeebled by its taint, is compelled to digest its food and to aerate and elaborate its blood for itself, hence its speedy manifestation of the hitherto latent disease(a). In those cases in which the foetus is born dead, with the skin peeling or covered with eruption, I suspect that close examination would show either that the mother has herself had primary disease or has by repeated pregnancies become saturated with the tertiary taint.

Barrenness.—Absolute arrest of the reproductive function does not appear to be a frequent result of the syphilitic contamination from a previous pregnancy. When it does occur, it may probably be looked upon as a preservative effort of nature to protect the system of the mother from further contamination. That syphilitic men are less fecund than others, is I believe an acknowledged law, but it is a rule which obtains with only very light authority, and about the same appears to be the case with women under like circumstances. The following case, at present under my care at the Hospital,

illustrates, I believe, the occurrence of sterility under these circumstances; it also affords an example of what is not at all unusual, an outbreak of specific symptoms previously concealed at the climacteric period.

Frances Needham, aged 42, was admitted under my care on September 22, of the present year. She had considerable oedema of the left leg and thigh, and great tenderness on the front of the tibia. There was an eruption of syphilitic tubercles on the same leg, and at the angles of the mouth were the scars of former fissures. The pain in the leg had existed for 7 or 8 months, and had been so severe at night as to often keep her awake. She was still florid but not of healthy coloration, and though stout she said she had lost flesh considerably. No menstruation had occurred for eight months, and there were no signs of pregnancy. She stated that she had been 14 years married, not long after marriage she miscarried of a 7 months' still-born child, was very ill at the time, and has been ill ever since. Had never been pregnant since, but on several occasions had missed menstruation for two or three months in succession, and then had a profuse flow. Before marriage she had always been robust and healthy, since it always ailing, though until quite lately without specific symptoms. Her hair was very thin, and she had leucorrhœa. She stated most positively that she had never had any sore on the genitals. *Case 49 in Table*. The only question of doubt as to absolute sterility in this case would be as to whether the occasions on which menstruation had been suspended for a month or two at a time, had not, although not so considered by herself, been in reality conceptions. In case No. 3 in the tabular report, the patient, a young woman, miscarried nine months after marriage of a 3 months' diseased foetus by which she had received contamination. Although married 7 years she had never afterwards conceived.

ANOTHER CORROBORATIVE FACT.

There is yet one other remarkable fact to which I must ask attention, as proving that the mother of a syphilitic infant has really received from it whilst in utero such contagion as it is capable of conveying, and that is, that although abundant instances are recorded in which syphilitic infants having sore mouths have infected the nipples of wet-nurses who have suckled them, yet not a single one, as far as my knowledge goes, has occurred in which the child's own mother was so contaminated. It was Abraham Colles of Dublin who first drew attention to this startling fact, and his experience has been confirmed by subsequent statements by M. Baumes, Mr. Egan and M. Diday. Now as mothers suckle their own infants in a proportion vastly greater than wet-nurses, they ought, were their liability equal, to furnish a larger number of instances of the disease spreading by this mode. Whence their immunity? Excepting we admit that they have already received the disease to the extent to which the foetus could convey it, I know not of any explanation which can possibly be suggested.

IS CONTAGION BY THE SEMEN, ETC. POSSIBLE?

It remains now to speak of the other modes which have been suggested as those by which women, whose husbands are of the syphilitic diathesis, but not presenting any external symptoms, may receive contagion. And, first, the theory of contagion directly from the seminal fluid. It would be rash to assert that such communication is impossible, and to deny positively that a fluid which can undoubtedly infect the ovum which it impregnates, is absolutely incapable of conveying its contagious materies by direct absorption, but I know of no facts which make it in the least probable. The cases hitherto held to illustrate it are, I think, far more simply and plausibly explained as contamination through the foetus. If the infection were caused directly by the spermatic fluid, it ought to be equally common in barren and prolific women. But it is certainly not so; I have seen numerous cases in which the wives of syphilitic husbands have enjoyed excellent health up to the time of conception; and the following, in which the interval between marriage and the first pregnancy was as much as eight years, seems so important that I shall venture to quote it. I read the verbatim account of it which I took in the winter of 1850. "Emma Page, aged 35, a woman whose straightforwardness of manner assured me of the truth of her narrative, gave me the following account of herself. She is a married woman, and her husband living. She is accustomed to fatigue and exposure, but of remarkably strong constitution, and never before under medical treatment. She married at 19, and her first child was born eight years after-

(a) Something also should, doubtless, be laid to the circumstance, that while in utero the foetus is protected from all external influences, and kept at an uniform temperature, conditions which are totally altered after birth.

wards. Her health, which had previously been excellent, began about this time to decline, "and she has never been right since." She has never had any sores on the genitals, nor any kind of discharge, excepting a slight leucorrhœa previous to menstruation. She never in her life miscarried. During the last few years she has suffered much from aching pains in the shins, head, and limbs, which have always been much aggravated during the nights, and she has seldom been free from scattered pustules of ecthyma. A month before the present date she began to suffer extremely from an exuberatingly tender swelling, situate on the subcutaneous part of the right tibia for weeks, "her nights were all but sleepless." The symptoms for which she came under care were, a large ulcerating node over the tibia, an ecthymatous eruption, and general cachexia. She was cured of them by specific treatment. Her husband she described as a very delicate, ailing man, never free from an eruption, and her only child, now aged 8, was said to be puny, of bad pale complexion, and from infancy liable to spots." Now, if constitutional syphilis were communicable by the spermatic fluid, here is a case in which the wife ought to have suffered eight years before she did so. In further proof that it is not so communicable, I may state that during the last seven years, during which I have been pretty assiduously at work in investigating the questions discussed in this paper, I have been seeking a case in which, without having ever once conceived, a married woman should exhibit the train of specific symptoms just described. I have met with but one, and, as my field of observation has been very large, I would rather believe that some error exists in this one; either that the woman had aborted unknown to herself, or that she had had primary disease, than allow it to interfere with a law which everything else seems to support. Mr. Paget, to whom I must acknowledge my obligation for the original suggestion of many questions here discussed, has also been long in search without success for such a case as that alluded to. The same, with but two very doubtful exceptions, has, I believe, been the experience of Sir B. Brodie. The following is a brief narrative of the only exceptional case which has occurred to myself.

No. 104.—Ann Baker, aged 38, a very unhealthy-looking cachectic woman, came under treatment on account of a syphilitic tongue on December 2, 1854. The tongue had been affected for two years, and she had been much under treatment. It was covered with streaks, fissures, and abraded patches, and presented a typical example of the disease. She stated that, two years ago, she had suffered from ulcerated sore throat, but of this no signs now remained. She had an induration in the cellular tissue, over the left knee. She stated that she had been married sixteen years, and that she had never been pregnant. Had never had sores or any kind of irritation about the genitals. Her husband she described as a pale, delicate man, liable to peeling of the skin in the palms and soles. Excepting the sore throat and tongue, both of them within the last three years, she did not admit having suffered from any suspicious symptoms. She took a long course of iodine, and was discharged quite well on June 2. At the time that I took the above notes of this case, I was not aware of how short may be the duration of a pregnancy which shall suffice to infect the mother, and did not institute sufficiently close inquiries as to whether menstruation had ever been omitted for short periods. Women often overlook abortions at very early periods. If a woman, who denied having ever been pregnant, yet admitted that, although of regular menstrual habit prior to marriage, she had on several occasions since had the courses suspended two or three times in succession, and then a more profuse flow than usual, I should be much inclined to suspect that she had, in reality, aborted. I believe I have seen several occasions in which contagion was conveyed by an ovum, which was expelled at between two and three months (b). The theory of Dr. Whitehead, that there

(b) This question is so important that I shall not be acting fairly to the reader if I do not state that since this paper was written (it was read before one of the Medical Societies and discussed) I have been assured by several distinguished Physicians and Surgeons, (Mr. Cock, Dr. Lever, Dr. Oldham, Mr. Erasmus Wilson, etc.) that they have met with cases which they believed to be genuine examples of contagion by the semen. With the exception of Mr. Wilson, who avers that they are of almost daily occurrence, all admit them to be very rare. In spite, however, of the opinions of these high authorities, I am quite incredulous as to the possibility of the occurrence. Were a man who has had syphilis, but is now apparently quite well, liable by the mere contact of the seminal fluid to infect his wife, how frequent such cases ought to be! Again, the semen is merely a secretion, and although of most peculiar endowments

remains in the secretion of the glans penis of a man who has once suffered from chancre, for long periods after all has been soundly healed, a something capable of communicating the disease is answerable by precisely the same arguments which have been employed against that by the seminal fluid.

FREQUENCY WITH WHICH MOTHERS OF DISEASED INFANTS RECEIVE CONTAGION.

We will now attempt to estimate the frequency with which the mothers of diseased infants receive contamination from them, and to answer the objection which might, perhaps, be raised on the score that so many of them escape. The printed statement on this subject, which is subjoined, was obtained by referring back to all the notes of cases of congenital syphilis in my possession. As many of these cases were taken a long time ago, and without any particular reference to this subject, they are unfortunately many of them deficient in the information needed. In order, however, to preserve their character as a statistical statement, I have preferred to mention the gross number, and to specify how many were on this account not employable. From the calculation thus made I find that, out of a total of 107 cases in which children suffering from congenital syphilis came under treatment:—

	Number.	Percentage.
Not noted in sufficient detail	24	..
Had herself had primary disease	14	17
Had suffered from specific symptoms without primary disease, (contagion from pregnancy)	37	45
Had syphilitic cachexia (contagion from pregnancy) but no specific symptoms	14	17
Escaped altogether, and remained in good health	17	20
The child believed to have derived syphilis from vaccination subsequent to birth; mother quite well	1	9
Total number	107	—

Among those who did not appear to have suffered at all were several who had been pregnant very few times, or perhaps only once. It will be evident, therefore, that the proportion of those who escape wholly is comparatively very small.

CONCLUSION.

And now, in conclusion, there is one question which has, I doubt not, suggested itself to most readers, and which, although a somewhat personal one, offers itself so naturally that some explanation may I think fairly be asked. How comes it, if the truth be as has been contended, that a form of disease of so frequent occurrence should have been so long overlooked? M. Ricord, who believes in the principle, speaks only of rare cases, and doubtingly even of them; and Mr. Acton, who, following Ricord's steps (though in this instance with some apparent hesitation) also admits the principle, states that he has witnessed but one case in which he thought syphilis had been so conveyed. How comes it, then, that a single observer, in a comparatively short space of time, should have been able to collect so many instances of its occurrence? The reason why those who admit that the fetus may infect

as regards the ovule, we have no reason whatever for thinking that, except it impregnates, it has any effect upon the maternal parts to which it is applied, or that indeed it is in any way susceptible of absorption by unabraded mucous membrane. Were it, as being a secretion of a diseased man, capable of conveying contagion on application to the mucous surfaces of another person, so ought the saliva, the milk, and the other secretions. Indeed, the doctrine once admitted would lead to most improbable consequences. On the other hand, that a diseased ovule may infect its mother is easy to comprehend, since there is a known interchange of fluids. That in the supposed exceptional cases unsuspected abortion at very early periods had really occurred, seems to me by far the more probable supposition. It must be borne in mind, that just in proportion to the virulence of the taint communicated by the father would be the liability on the part of the ovule to early death. The most diseased, in other words, those most capable of infecting the maternal system, would be the very ones most likely to die and be expelled at early periods. A conception following close on one menstruation might be carried for a month, and if expelled at or near the occurrence of the next would excite no suspicion in the mind of the mother that she had ever been pregnant, although it might, meanwhile, have severely affected her system. In this way, within six months of marriage, several contaminating impregnations might occur; and, as the instances of constitutional syphilis conveyed without either primary sores or known pregnancy are very rare, I would far rather have recourse to such an hypothesis as this than believe in contagion by the direct absorption of a normal secretion.

the mother have not found it to occur more frequently, I believe to be that they have looked for a wrong class of symptoms. The class in which any violent outbreak of secondary symptoms occurs is very small indeed, for the obvious reason that very few men, indeed, marry until a considerable period has elapsed since the primary disease. The symptoms which characterize the disease as derived from foetal contagion are, for the most part, vague, of a late tertiary type, and very likely to be misinterpreted. The sufferers themselves often think them but trivial, and do not seek advice. In not a few of the cases in the table the mothers only came under my observation on account of their bringing syphilitic children for treatment. Some of the symptoms, excepting to a suspecting eye, and unless duly weighed in connexion with their attendant phenomena, would not have been ranked as syphilis. In another class of cases many surgeons would, probably, have refused credence to the patient's statement, and insisted that, at some former period, she must have had primary disease. Then, again, as to the number of cases collected, I may state that my field of observation, formerly at the Hospital for Skin Diseases, and latterly at the Metropolitan Free Hospital, has been very large as it regards this class of diseases. By these circumstances the discrepancy noted may, I think, be satisfactorily explained. The class is, I cannot feel a doubt, a large and very important one, and upon its right recognition will often depend the success or failure of surgical therapeutics.

THE LONDON
PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

SLOUGHING OUT OF A CANCER OF THE BREAST
UNDER THE APPLICATION OF A LOTION
OF CHLORIDE OF ZINC.

(Under the care of Mr. STANLEY.)

A very important case is now under care in St. Bartholomew's, and is well worth the examination of any who may have the opportunity of seeing it. A feeble old woman, of about 69, applied to Mr. Stanley some months ago, on account of a cancerous tumour in the left breast, which had existed about three months. Already there was a gland enlarged in the axilla, and Mr. Stanley, after consultation with Mr. Paget and others, agreed that on account of this circumstance, and of the patient's feeble health, it was not desirable to perform an operation. Two months later, in the latter end of November, she again applied, and was now admitted, the cancer being a large mass, and having ulcerated a little below the nipple. The ulceration was about the size of a crown-piece, and presented the usual characters; the mass below it was the size of a small apple. Mr. Stanley now determined to make trial of a remedy which had been recommended to him by, we believe, Mr. Kiernan, as possessing the power of making the cancerous growth die and slough out, without causing material pain, or injuriously involving the adjacent tissues. This remedy was a dilute solution of the chloride of zinc, and consisted of one part of Burnett's fluid to six of water. It was applied upon pieces of lint the size of the sore, changed repeatedly during the day, and soaked with the lotion. The strength specified causing some pain, it was, after a day or two's use, changed for one of five parts to eight. With the latter, the pain caused was very trivial; the old woman was able to be up and about the ward all day, took her meals well, and slept fairly. The effect of the application was to make the surface assume an appearance not unlike dirty washleather, and to shred away. There did not appear to be any actual sloughing of the skin, excepting of its diseased edge, but the ulcer much enlarged (by retraction?) and a line of demarcation formed around the tumour. Each day considerable quantities of shreddy substance were scraped from the surface of the tumour, in order to allow the fluid better to permeate its structure. By degrees the mass became circumscribed, and the whole of it quite dead and sloughy (without fetor). Last Saturday, about four weeks from the commencement of the treatment, Mr. Stanley cut through, with the scissors, the last remaining fibres of attachment (quite dead) of the mass, and removed the whole, it being fully

the size of half a fist. The sore now remaining would, perhaps, nearly contain a small fist. It is perfectly healthy in all parts, and granulating well, and excepting a slight induration of its upper margin, there is nothing at all suspicious of remaining cancer. The lower edge is rapidly contracting, and, indeed, the healing process during the last fortnight of the treatment, during which the use of the lotion had been desisted from, the wound had materially decreased in size. The woman is in good health, and is up most of the day. The axillary gland remains *in statu quo*.

There can be little reasonable doubt but that in this case the sloughing out of the cancer in the manner described has been the *bonâ fide* effect of the remedy applied. Cases of spontaneous enucleation of cancer by sloughing do, of course, occur occasionally, but in this instance there was nothing at first at all suggestive of such being about to happen, and it advanced during the treatment *pari passu* with the use of the means. Of course, too much must not be assumed from one case. Further experience may prove the event to be a very exceptional one. The treatment is, however, well worth a trial in these distressing and most hopeless cases, and as such we hasten to bring it before our readers. The almost painlessness of the remedy and its freedom from all danger are great recommendations. According to the theory of the plan it is necessary that cancers should be ulcerated in order to be suitable for the application, the solution appearing to be potent only to the destruction of lowly organised morbid growths, and having no effect upon the healthy tissues. It may, perhaps, be known to many of our readers, that for some time past a certain American Surgeon, named Fell,—whom, solely from the fact that we believe he possesses a diploma, we hesitate to call a quack, but who, at any rate, is making a considerable fortune by means of a treatment which he keeps a strict secret,—has been practising at the West-end by some plan which appears to be very similar in its results to that above described.

HOSPITAL NOTES.

DEAFNESS DEPENDENT ON SYPHILIS OR RHEUMATISM.—About six weeks ago, Dr. Fuller directed our attention to an interesting case he had just admitted under his care at St. George's Hospital. It was that of a married woman, 37 years of age, who had been attacked, fifteen weeks previously, with rheumatism affecting the joints and the periosteum in various parts of the body. Coincidentally with the commencement of this attack she had begun to suffer from earache and deafness; and Dr. Fuller expressed a confident belief, founded on observation of similar cases, that this symptom was attributable to rheumatism, and would gradually subside with the cessation of the articular affection. The character of the disease gave rise to a suspicion as to its venereal origin, and therefore, although no admission could be elicited as to the correctness of this supposition, sarsaparilla with iodide of potassium and acetate of potash were prescribed in full doses. To-day (Dec. 27) we have had the opportunity of seeing the woman again. The treatment just prescribed has been steadily continued, the deafness has ceased, the periosteal swellings have disappeared, and the articular pains have almost wholly subsided. Dr. Fuller remarked that the case closely resembled one which fell under his care in private practice fifteen months ago, in which a gentleman suffering from periosteal rheumatism was seized suddenly with acute pain in the right ear, followed by complete deafness on the right side. The patient admitted that his attack had been preceded by syphilis, and accordingly cinchona with biniodide of mercury were prescribed. In three weeks the rheumatism had subsided, and the deafness had ceased. Several instances of the close relationship subsisting between syphilitic rheumatism and certain forms of deafness, though less strongly marked than those above alluded to, have fallen under Dr. Fuller's observation. The Doctor briefly referred to one of these, which occurred in the person of a man 32 years of age, who was admitted under his care at St. George's Hospital three years ago. The symptoms began by articular swellings and deafness, and were accompanied, after the lapse of nine days, by slight gleetish urethral discharge, which subsided after three days' duration. Coincidentally with the cessation of the discharge, two large soft nodes appeared, one on the forehead and the other on the sternum. Iodide of potassium, sarsaparilla and cinchona bark were exhibited, and

in less than a month the pains had ceased, and hearing was almost fully re-established. Two drachms of the liq. hydragryri bichloridi were then added to each draught, and in little more than a fortnight no deafness remained. Dr. Fuller suggested that rigidity of the parts connected with the internal ear, resulting from rheumatic inflammation, may be the cause of the loss of hearing in these cases; and he referred to the absence of any obvious affection of the external ear, the suddenness of the attack, its complication with earache, its coincidence in point of time with the articular and periosteal pains, its temporary nature, and its amenability to treatment directed against the presumed cause of the seizure, as some of the points which indicate its true source and nature.

EXCISION OF THE HEAD OF THE FEMUR.—The case which we noticed about a month ago, in which Mr. Hancock, at the Charing-Cross Hospital, had excised the head of the femur, has since done very well, and there is good promise of recovery with a useful limb. On Wednesday last Mr. Erichsen performed the operation on a patient of his in University College Hospital. The patient was an extremely emaciated boy, of about five years old. The bone was dislocated on to the dorsum, the thigh bent on the pelvis. There were several sinuses, but no great amount of swelling, and the child's health seemed fair. The finger pressed into one of the sinuses over the back of the joint felt bare bone. An oblique T-shaped incision was employed, and the bone turned into the wound, and its shaft sawn through just below the trochanter with Butcher's saw. Owing to the strong adhesions it had contracted, some difficulty was encountered in throwing the head of the bone out. The whole of the rounded facet of the head had been absorbed, but the exposed surface was sound in most parts, and covered with organizing fibrous tissue. The caries appeared to be progressive in comparatively a very small part of the surface. Mr. Erichsen also gouged away a surface of roughened bone from over the lip of the acetabulum, but the cavity of the latter itself was sound, *i. e.*, repaired. The case is one which promises well.

LARGE SEMI-ERECTILE TUMOUR DEVELOPED IN THE POSTERIOR PART OF THE ORBIT OF A CHILD—REMOVAL OF THE GLOBE.—There is a little Jew boy, now under Mr. Critchett's care, in the Moorfields Ophthalmic, from whom a tumour of very peculiar character was removed about three weeks ago. At 15 months old—he is now 7 years—he had a fall, and struck his left eyebrow on the edge of a fender. It bled much, and was treated by a compress. Three or four months after a swelling was noticed, not exactly under the bruise, but in the upper part of the orbit. It increased, and pushed the eye forward and downward. During the last year its growth had been much more rapid than before, and the boy had also emaciated and lost health. There was no family history of cancers. The eyeball itself was very much displaced, but still retained visual power. Mr. Critchett removed the whole of the tumour, and with it the globe, as the growth surrounded the optic nerve, and filled up the posterior part of the orbit. To the naked eye the tumour much resembled a piece of congested spleen, or an organizing blood clot. With the microscope no evidence of nevoid tissue could be discovered. Mr. Critchett suggested that it had probably originated in some extravasation of blood which had organised, and acquired powers of growth. The parts are healing fast.

SERIES ILLUSTRATING THE CONNEXION

BETWEEN

BRONZED SKIN AND DISEASES OF THE SUPRA-RENAL CAPSULES.

(Continued from page 9.)

ST. BARTHOLOMEW'S HOSPITAL.

FOUR CASES, IN WHICH THE SUPRA-RENAL CAPSULES WERE ONE OR BOTH DISEASED, NO BRONZING OF THE SKIN HAVING BEEN NOTICED.

For the particulars of the five following cases we are indebted to Dr. Senhouse Kirkes, of St. Bartholomew's. They constitute an important contribution to our knowledge of the diseases of the supra-renal capsules, and are not the less

important because they were all observed several years ago, and before the connexion between diseases of those organs and bronzed skin had become known. From this circumstance the case No. 5 is of peculiar interest, as it fully bears out Dr. Addison's theory, although noted before that theory had been made public. Nor are the other four in any way exceptional. In the first one both the capsules were extensively diseased, and the skin was noted in the one as "pallid;" but the following facts must be borne in mind:—(a) The disease in each was of recent character; (b) the organs were not totally destroyed; (c) no particular attention was directed to the colour of the integument, and it is very possible that some faint commencing discoloration might have escaped observation. These comments apply with increased force to the three other cases, in each of which one organ only was affected. The cases all occurred in the wards of St. Bartholomew's Hospital, and came under Dr. Kirkes' notice in his capacity of Medical Registrar and Demonstrator of Pathological Anatomy.

Case 1.—Death from debility, etc., no emaciation existing.—Disorganization of both supra-renal capsules.—No bronzing of skin noticed.—A man, aged 25, was admitted on account of symptoms of great exhaustion attended with nausea, vomiting, and faintness. He had been badly off, and there was the history of an attack of fever two years ago. He was a muscular man, but pallid. His present symptoms had been increasing for about six weeks. He sank rather rapidly into a state of exhaustion resembling that of cholera. For some time before death no urine was secreted. At the autopsy, excepting a little old tubercle in the lungs, the supra-renal capsules were the only organs diseased. Both were large, and filled by several masses of firm, yellowish, cheesy-looking matter (old tubercle?), in which particles of calcareous material were also imbedded.

The mode of death and character of preceding symptoms in this case are well worthy attention, as exactly similar to those observed in others in connexion with diseased supra-renal capsules. There can be no doubt that the man died of that disease.

Case 2.—Death from phthisis; no bronzing noticed.—Tubercular deposit in one supra-renal capsule.—A man, aged 47, died in St. Bartholomew's, having presented all the usual symptoms of phthisis. He had also very irritable bowels and fetid breath. His emaciation was not extreme. No bronzing of the skin was either noticed or looked for, and at the autopsy the corpse was described as presenting "no marks." Extensive tubercular disease of the larynx, trachea, lungs, and intestines was found after death, and the left supra-renal capsule was enlarged, and contained some masses of opaque yellow substance resembling tubercle. The right supra-renal capsule was not examined.

Case 3.—Death from epilepsy—General tuberculosis.—Tubercular deposit in the right supra-renal capsule, the left being healthy.—A man, aged 34, by trade an ostler, and of intemperate habits. He was admitted on account of repeated attacks of epilepsy having occurred, and in one of them died. At the autopsy it was noted that he was a well-nourished man, and that no spots were visible on the surface. Tubercle was found in most of the viscera. The right supra-renal capsule was thickened and distorted from large masses of firm yellow cheesy tubercle deposited within it, and apparently replacing the proper tissue of the gland. The left was healthy.

Case 4.—Death from cancer of the brain—No bronzing noticed.—Disorganization of the left supra-renal capsule, the right being healthy.—A stonemason, aged 43, of intemperate habits, had suffered for two years from symptoms of chronic disorganization of the lungs, with hemiplegia. He died in coma succeeding to a fit. No bronzing of the surface had been noticed. At the autopsy the corpse was noted as pale and rather wasted. There were cancerous deposits in the lungs, brain, and kidney. The situation of the left supra-renal capsule was occupied by a hard nodular mass, the size of a pear, composed of dense, dry, yellowish material, closely similar to degenerated tubercle. The right organ was healthy.

Case 5.—PHTHISIS—SLIGHT BRONZING OF THE SKIN—DEATH—DISORGANISATION OF BOTH SUPRA-RENAL CAPSULES.

A man, aged 21, was admitted on account of the symptoms of phthisis. He had cough, night-sweats, emaciation, and great irritability of the bowels. His skin generally was no-

ticed to be of "a peculiar yellow, sallow tint, as if sunburnt." He sank gradually, and died about ten weeks from the commencement of his more severe symptoms.

Autopsy.—Tubercular disease of both lungs, old ulceration in the large intestine, evidences of past peritonitis and pleurisy. Both supra-renal capsules were enlarged, and showed no traces of their original structure, the place of which was occupied by yellowish and apparently tubercular matter. In the right this deposit was firm and cheesy, and was surrounded by a hard, whitish, capsule-like tissue. In the left, within a similar dense, greyish-white kind of capsule, the matter was softer, and in parts quite puriform.

Dr. Kirkes remarks on this case, that during life the change in tint of the skin was "obvious and striking."

THE CITY HOSPITAL FOR DISEASES OF THE CHEST.

BRONZED SKIN, WITH PECULIAR AND MARKED CACHEXIA—DEATH.

(Under the care of Dr. EDWARDS.)

The following case is one of much interest in reference to the symptom of bronzing of the skin, although imperfect from the want of a post-mortem. It shows a peculiar and very marked cachexia attending that symptom, and so exactly corresponded in its history with other cases, that there could be but little doubt as to its real nature. The notes were taken by the writer, to whom Dr. Edwards was good enough to afford an opportunity for seeing the man, who was then under care as an out-patient:—

John Horward, aged 39, a toll-collector, and formerly of very good health. He left off work about six months ago, but for two years back has been of "a nasty brown colour," losing flesh and feeling increasingly weak and languid. In spite of these symptoms, he continued at his occupation, which involved exposure to all weathers, his tint of skin getting darker, and being the subject of remark from his friends. Since he laid up, he has got weaker and weaker, and, to use his own phrase, "has never for one day been the least better." In describing his colour, he used the term "as if he had been bronzed" spontaneously; he said also that, when sitting in the waiting-room at the Hospital, his colour used to attract great attention, and that the patients used to say that he had got "the brown jaundice." He is an intelligent man; has taken great interest in his own case, and describes his symptoms vividly. When he first began to lose strength, he states that he used at times to suffer from a pain "across the kidneys" on lying down, which came on for a few minutes, shooting across the back, and then going completely off. He used also, sometimes for a day or two at a time, to have "a nasty pain under the edge of the ribs behind," now on one side, now on the other, which came on at intervals of about a month. Excepting these pains, the loss of strength and flesh, and the browning, he had no symptoms of disease until he laid up, since which he had those of phthisis.

He is now almost confined to bed, not extremely emaciated, but says he is so weak that he can scarcely walk. He never faints, but is made breathless by the slightest exertion. Frequently has slight rigors in the day time, and perspirations at night. He is hoarse, and has a good deal of cough and expectoration. Cannot eat fat meat, of which he used to be fond; is still able, however, to take pork and bacon. The bowels are costive, and rarely act oftener than twice a-week. There are the signs of a cavity in the left apex; but the pulmonary disorganisation is not extensive, and not at all adequate to his constitutional state of debility. His skin in all parts is of a deep brown tint, being darkest in the axillæ, around the nipples, and on the genitals. The sclerotics are clear, pearly, and white, contrasting remarkably with his skin. A faint disagreeable odour, somewhat like that of a negro, is exhaled from his body. There are no markings discoverable in his mouth. He is of dark complexion as regards hair and eyes, but states that when in health he had a clear skin. His pulse is remarkably soft and feeble, and about 110; tongue nearly clean, but flabby. He has for nearly six months past taken quinine and cod-liver oil, but without the slightest apparent benefit.

About a month after the above notes were taken the case ended fatally; and although the patient had himself been

desirous that an inspection should take place, his friends gave no information of his death until after the funeral. It is extremely to be regretted that so important a case should be left thus incomplete, as it is one of the first in which active phthisical symptoms have developed themselves upon the bronzed skin cachexia. It must be noted that the chest symptoms supervened a full eighteen months after the commencement of change of colour in the skin.

THE FOREIGN

PRACTICE OF MEDICINE AND SURGERY.

THE BELLE VUE HOSPITAL, NEW YORK.

BRONZED SKIN AND CACHEXIA—DEATH—DISEASED SUPRA-RENAL CAPSULES.

Under the care of Dr. TAYLOR (a).

Thomas White, aged 22, an Irishman, admitted June 13, 1856. Two years ago had had symptoms of phthisis, which had however completely subsided. He was feeble and emaciated, liable to nausea and vomiting, with constipation and pain in the right side. His pulse was small and weak. His face and neck were of a light sunburnt hue, (sufficiently dark to lead to the diagnosis of supra-renal capsule disease;) his conjunctiva being meanwhile pale and anemic, and the sclerotics pearly. There were no indications of organic disease other than those mentioned. He complained throughout mainly of weakness and languor, and his skin continued to get darker. Two days before death he had partaken freely of spirits, on the exhilaration from which passing off he became drowsy and stupid. Suppression of urine followed, and he died comatose on July 26. There was no albumen in the urine. Dr. Taylor describes the colour of the skin as being a dirty shade of yellow, extending with an abrupt line of demarcation across the forehead, affecting the whole face and the upper part of the neck, but leaving the trunk, &c. quite free. The backs of the hands were also brown, and the deepness of colour was in exact proportion to the exposure of the part, the most prominent being the darkest, and those always covered being of healthy tint. On each lip were some small darkish red spots, which during the time he was under observation had deepened in hue. Considerable hebetude of mind was displayed, and his expression was dull and listless.

Autopsy.—Discoloration most marked on face and neck, slightly darker tinges about the axillæ than elsewhere, and a shaded patch, about the size of a hand, on the right side of the abdomen. There were some old cicatrices in the apex of each lung, and a few scattered tubercles, with which exception the thoracic and abdominal viscera were generally healthy. The right supra-renal capsule was entirely disorganized, the left almost so. The left was as large as the half of a hen's egg, and contained, within a very thin layer of cortical structure, a solid and semi-fluid collection of tuberculous matter. The right was not so large, but consisted solely of tuberculous material, in part solid, and in part fluid.

Remarks.—This case gives us, as do also some of the following and preceding, a good connecting link between those such as reported last week, in which the skin had undergone no change in colour, and those in which it became so dark as to be bronzed throughout. We see the deepness of tint and extent of the patches coloured, exactly in proportion to the duration of the disease. In Dr. Peacock's cases the disease was acute cancer, and although the organs had been wholly destroyed, yet no browning had resulted. In the above instance, the disease had been more slow, and a partial change, a mere sunburnt condition, was evinced, while in that given last week (Dr. Baley's case), in which the disease had lasted several years, a state of deep bronzing had resulted.

ALBUMENURIA—INCIPIENT BRONZING OF THE SKIN—DEATH—DISEASED SUPRA-RENAL CAPSULES.

(Under the care of Dr. TAYLOR.)

George Comb, æt. 42, an Englishman, was admitted on June 24, 1856. His appearance was anemic, and resembled

(a) This and the following case are abstracts from a paper published by Dr. Taylor in one of the American Medical Journals, and since reprinted in the pamphlet form. Coloured illustrations are given.

that of a patient suffering from albumenuria. The urine was examined, and found to deposit a small quantity of albumen, sp. gr. 1010. The skin was dry, but there was no dropsy. Two weeks after admission Dr. Taylor noticed that the lower part of the forehead was beginning to assume a sunburnt appearance, and this afterwards extended over the whole face. There also showed themselves about this time over the whole body spots much resembling a faded syphilitic eruption, a disease from which, however, he averred that he had never suffered. He became more and more feeble, and after having had two convulsions died in a state of coma on August 4th. It should be stated that he dated his ailments back only six months, when they began in what he termed a sunstroke. His bowels had been constipated. The browning of the face was advancing rapidly during the three weeks prior to death.

Autopsy.—The colour of the face was much less strikingly browned than during life, consisting only of a light, dirty yellowish appearance; it was still, however, undoubted. The spots on the body were of a darkish yellow, and looked like one of the forms of psoriasis, excepting that they were not furfuraceous. The upper lobe of the left lung was consolidated by milary tubercles, and in the apex of the right were old cicatrices. The liver was fatty; the spleen was much enlarged; the kidneys were pale, and in the last stage of fatty degeneration. "The left supra-renal capsule was almost completely atrophied, being less than a fourth its natural size, and broken down into a grumous mass. The right was somewhat smaller than natural, had lost its normal colour, and become dark chestnut. On cutting it open it was found that the greater part of the organ had become broken down into a grumous semifluid mass, leaving only a thin part of healthy tissue."

Dr. Taylor adds to his paper the details of two other cases, giving also portraits of the patients; but as the latter were living at the time of the report, we need not now enter upon their histories. In both it appears that the bronzing is as yet almost confined to the face, and does not amount to more than a deep sunburnt appearance. (Such, at least, is Dr. Taylor's description; the portraits show it in patches of *dark bronzed* hue.) The one patient manifests as yet no material cachexia, while in the other he is apparently about to die of mere feebleness. Both are men, and of the respective ages of 28 and 55. We shall be much interested in hearing the conclusion of these cases.

NOTES AND QUERIES.

He that questioneth much shall learn much.—*Bacon.*

No. 170.—LOCK HOSPITALS.

Any of the contributors to the *Medical Times and Gazette* given to antiquarian lore who can tell us anything of the meaning and history of Lock Hospitals would oblige
January 2, 1857. W. R.

No. 171.—RODENT ULCER.

Would any of your readers have the kindness to inform me where I can find an account of "Rodent Ulcer;" or what are all the important distinctions between it and Epithelioma? I have at present a case, which, as far as I can tell from the descriptions I have met with, appears to be one of Rodent; and I am anxious to gain some more information about it, to assist me in my diagnosis. I am, &c.

January 5, 1857.

M.R.C.S.

No. 172.—THE MEDICAL SCHOOL OF SALERNUM.

Can any of my readers refer me to a description, in any English or French work, of the Medical Schools of Montpellier and Salerno? X.

ANSWERS.

No. 158.—VACCINATING DOGS TO PREVENT DISTEMPER.

Allow me to refer your correspondents on this subject to the following passage in Dr. Baron's "Life of Jenner:" London, 1838: vol. i. p. 443:—

"The ever-active mind of Jenner was now investigating the history of some of the other disorders of the inferior animals. Among these was the dog-distemper. He found

that animal to be very susceptible of the variola vaccinae, and he believed that, after having undergone the influence, it was rendered unsusceptible of the distemper. Several of our great fox-hunters eagerly availed themselves of this hint, and had their hounds vaccinated. This practice is, I believe, not now in use. A paper on the dog-distemper was, some years after, presented to the Medico-Chirurgical Society of London by Dr. Jenner. This paper was printed in the first volume of their Transactions in the year 1809."

Vaccination is still practised by some persons in London as a prophylactic against the dog-distemper.

I am, etc.

79, Park-street, Grosvenor-sq. JAMES MORRIS, M.D.

No. 166.—DR. JAMES SIMS.

I feel obliged for the answers to my query respecting Dr. Sims; but, unluckily, the information conveyed differs so widely that I am left in a confusion of mind worse even to endure than my former total ignorance; one kind respondent stating (on the authority of Maunder) that Dr. Sims was born in Canterbury; the other (quoting from the manuscript annals of the London College of Physicians) asserts that he was an Irishman; a fact, I believe, I had already stated myself in my query the week before last.

To M. R. I., I feel indebted for his courteous reply and useful reference, but when I started the inquiry, it was with the hope that some friend of the late Dr. Sims might be found still existing who could give more minute information than that contained in the annals of the College.

To Mr. H. I. Maysmor, I also present my thanks for the extract given from "Maunder's Biographical Treasury," though I have to inform him that I already possess the work, but put little faith in it. One meets with a fallacy occasionally in Maunder, which makes one timid of a too confiding credence. For instance:—At page 553 of the sixth edition of the "Biographical Treasury," we find a notice of the Rev. Charles Maturin, Curate of St. Peter's, Dublin, author of "Bertram," "Melmoth," "Women," and other works, who died in 1826. But, at page 888 of the Supplement, added, says Maunder, "to render this work complete to the very moment of publication," we have an account of the Rev. Henry Maturin, rector of a parish in Donegal, who died in 1842, aged 70, to whom all the above works—"Bertram," "Melmoth," "Women," etc.—are also ascribed; can we, then, put our trust in "The Treasury?"

Had it, indeed, been stated that the latter learned divine was a distinguished Fellow of Trinity College, one gleam of truth might have been gained from the *Maundering* notice; but this principal part of his life has been omitted.

I am, &c.

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BRIDGEWATER INFIRMARY.—A Special Meeting of the subscribers was held last week, for the purpose of electing a Medical Officer, in the room of J. G. Toogood, Esq., who had resigned. Mr. J. Browne moved,—“That it be recommended to the subscribers, at their next general annual meeting, to take into their consideration the expediency of altering the 27th rule of the Institution, so that the number of Surgeons be restricted to three.” Mr. W. J. Ford seconded the resolution, which was carried unanimously, and the meeting terminated.

Medical Times & Gazette.

SATURDAY, JANUARY 10.

MEDICINE IN MARYLEBONE.

THE Guardians of the populous and wealthy parish of St. Marylebone are repeatedly falling into difficulties with their Medical officers. Like a well-proportioned gentleman operated upon by a bad tailor, or a somewhat deformed gentleman who is unnecessarily crotchety with a good one, the article never fits the wearer. Sometimes the coat is too tight, sometimes it is too loose; sometimes it is too long, sometimes it is too short; sometimes the padding is put in the wrong place, sometimes it is left out in the right one; under any circumstances the customer is dissatisfied, and the tailor is dismissed. Thus, in the parish to which we allude, the vicissitudes of the Medical department have been as numerous as the changes of Proteus himself. At first, we recollect that a regular staff of Medical officers was maintained, consisting of gentlemen of high reputation in the Profession, and the Infirmary of St. Marylebone was actually regarded as a school of practical medicine. Then this system was abolished, and instead of non-resident physicians and pure surgeons to attend the poor in the workhouse, the Guardians determined to engage a class of Medical officers who should reside in the house, and exclusively devote themselves to attendance upon the sick poor, both in and out of the establishment. Now the cost of this arrangement appears, from the report of the Guardians themselves, to have been exceedingly moderate, whatever defects it may have exhibited in other respects; for we are told that in the year 1851, under the arrangement to which we now allude, some 16,236 patients, in and out of the house, were attended at a cost of £1626, including drugs, chemicals, leeches, stimuli, trusses, surgical instruments, and salaries of the whole Medical staff, in a district containing, we believe, somewhere about 250,000 inhabitants. By the rule of three it will be seen that on an average each case of illness cost the parish about two shillings, which the most rigid economist, we venture to think, would not regard as an immoderate sum. Nevertheless, the Guardians considered the outlay extravagant. They accordingly again altered the system, and instead of supporting the whole Medical staff in the workhouse, the out-door poor were attended by district practitioners, the inmates being still attended by resident surgeons. By this step, however, the Guardians seem to have fallen from the frying-pan into the fire; for, whereas, under the previous scheme, the whole cost for in and out-door sick paupers was, as we have seen, £1626 in the year 1851; no sooner did the new plan come into operation than it was found to be more expensive than the old one, and the expenditure rose to £2015 in one year, although the number of patients attended had been much reduced. We are further informed that the cost of the Medical department in the workhouse alone (under the new system) in the year 1855, amounted to more than the cost of the in-door and out-door Medical relief put together in the year 1853. This was a puzzling result to the Guardians, who, having made the change only on the avowed motive of economy, were naturally surprised to find that they had been guilty of a very serious miscalculation.

The last movement of this body is worthy of so economical a set of gentlemen, and deserves to be recorded as an instance of the manner in which the members of our Profession are treated by Parochial Boards. We must premise that, in the Marylebone workhouse, and in many other similar establishments, the medicines and other appliances are provided at the expense of the parish, and the Medical Officers are paid for their services only,—an arrangement which is obviously founded upon the very natural supposition that Medical men are gentlemen, and not tradesmen; and that they do not make a profit upon their drugs and leeches, like the ordinary vendors of those articles. Whether the authorities of St. Marylebone are inclined to Homœopathy, and imagine that the sick poor ought to be amused by infinitesimal globules, or whether they conclude that, when a Medical Officer has to supply the drugs himself, he will economize the consumption out of regard to his own pocket, we do not pretend to determine; but the proposition which was presented to the Guardians at their last meeting was, that, instead of the present system of indoor relief, the Board should advertise for applications from duly qualified Practitioners (not under 40 years of age) *to contract to attend upon the inmates of the workhouse on all occasions: to find all drugs, chemicals, instruments, and appliances, except trusses, and to provide a duly qualified assistant, who would be provided with board, lodging, and washing in the Workhouse.* The gentleman who proposed this plan to his colleagues believed that, if the recommendation were adopted, not only would the inmates receive first-class Medical attendance, but (what was, no doubt, of far greater importance in his eyes) *the cost of the Medical department would be greatly diminished.* It is only just to state that the seconder of the motion appeared to be ashamed of the task he had undertaken, and objected to the proposition of making such a contract with a Medical Officer. He thought it would be better to offer a good liberal salary to the competition of the Profession, such as would secure the services of some eminent Medical Practitioner. What is here meant by a good liberal salary we are unable to explain; although we have no doubt that, if a lawyer were required to give his services to the Board, he would expect at least some £600 or £700 per annum, exclusive of his law expenses. But, as the whole cost of Medical advice, medicines, instruments, stimuli, etc. for some 16,000 sick paupers was only £1600 in 1851, with at least some half dozen duly qualified Medical Practitioners engaged exclusively in their service; and, as this outlay was considered monstrously extravagant—under these circumstances, we say, it is a very doubtful matter whether our own ideas as to what constitutes “a good liberal salary” would coincide with those of the Marylebone Board.

For the sake of the respectability of the Profession, we feel it our duty to denounce the attempt thus made by the Guardians of one of the largest, most aristocratic, and most wealthy parishes in the metropolis, to reduce the members of our Profession to the level of petty tradesmen, selling their wares at the lowest possible price, and underbidding one another in their pursuit of gain. Whatever these Guardians may think of the necessities of some members of our Profession, we doubt very much whether any “eminent medical man” will condescend to compete for the degrading contract to supply “drugs, chemicals, leeches, stimuli, and a duly qualified Medical Assistant,” to an enormous workhouse, having, on the average, about 1,600 patients per annum in the wards of its Infirmary. Such an establishment should have a competent staff of medical attendants, who ought to be adequately paid, and who should be wholly unconnected with any interest in the supply of drugs, or leeches, or any other articles the sale of which belongs to the business of the druggist, and not to the Profession of Medicine.

THE WEEK.

THE following correspondence between Mr. Fox and the Guardians of the Romsey Union has been sent to us by Mr. Griffin. We cordially concur with Mr. Griffin in the hope that no gentleman will be found who, by accepting the vacant appointment, would verify the words of the Poor-Law Board that "whenever a vacancy occurs there are plenty of candidates for the office, and, therefore, there is no need of increasing the salaries :"—

"TO THE BOARD OF GUARDIANS.

Romsey Union, Dec. 20th, 1856.

GENTLEMEN,—I beg respectfully to state, that as the price of articles consumed in conducting a Union practice, viz. corn, hay, and horseflesh (not to mention double income-tax) has advanced, I am compelled to apply for an increase of salary. I would remind the Board that my present stipend is only 13s. 10d. per week for attendance on the sick paupers in a population of 1400, over an area of 5000 acres, a sum quite inadequate to the duties required.

I am, &c.

L. OWEN FOX."

"Romsey Union, Dec. 29th, 1856.

The application of Mr. Fox, Medical Officer, for an increase of salary, for reasons stated in his application, was considered, and it was moved and resolved unanimously that, at the special meeting held this day, the Board declined to augment the salary of Mr. Fox; but in case Mr. Fox should be dissatisfied with the present rate of payment the Board will be happy to receive his resignation.

Ordered—That the clerk do forward a copy of this minute and resolution to Mr. Fox."

"December 31st, 1856.

GENTLEMEN,—I beg to inform you that I cannot continue my services as Medical Officer on the present terms, and, therefore, give you notice that on and after 26th January next I shall resign my appointment.

I am, &c.

L. OWEN FOX."

The low salaries at which Medical men consent to attend to Union practice in England is having a bad effect in Ireland. The Guardians of the North Dublin Union have fixed the salary of the Dispensary Physicians at £75, and the argument which seemed to have the greatest weight with the Board was a contrast between "the small salaries given to Dispensary doctors in the English Unions, with the large sums expended here in *overpaying* (!) the dispensary Physicians." Though it was shown that each Physician had to attend more than a thousand cases in the year, one member was loudly cheered who said that "£75 was quite enough for a Dispensary doctor." If our Dublin friends can find a lawyer who would attend to a thousand cases for £75 there must be a great deal less Professional feeling among Irish barristers and attorneys than there is on this side the Channel. We should not notice the observation by one member of the Board, that "Doctors were no better than journeymen bakers," had there not been at least one gentleman present at the meeting who ought not to have allowed such an observation to pass without reproof. Had such a thing been said of lawyers we can very well imagine how it would have been met by the barristers present.

On Monday the Fellows of the College of Physicians were invited to meet at the College to receive the new President, and were informed that the choice of the Elects had fallen on Dr. Mayo. The ceremony was not an interesting one. The Fellows were merely called together to receive the President chosen for them by the Elects. Dr. Mayo was introduced; the usual form of a Latin speech was made by Dr. Turner, the Senior Elect; and, after a congratulatory speech from Dr. Latham, and a few words of reply from Dr. Mayo, the

meeting separated, an address of condolence having been voted to the family of Dr. Paris. While congratulating Dr. Mayo (an old and valued contributor to this Journal) on his election, we believe we express the opinion of the great body of Fellows when we say that the sooner the mode of election is reformed the better, and that we trust the new Charter will be obtained before another election take place.

A case of suicidal poisoning by strychnia has been reported in the political newspapers during the last week; but the account is so loosely drawn up that we are induced to regret the absence of any authorized record in which the particulars of Medico-Legal investigations are accurately set forth. In the present instance it is stated that a woman, having procured a considerable quantity of strychnia, swallowed it for the purpose of self-destruction, and, although she was seen in perfect health at four o'clock one afternoon, she was found dead at a quarter to six of the same day; and what is most extraordinary, her sufferings, if she had any, were wholly unknown to any person, although she was in a respectable service, and the effects of the poison might have been expected to excite attention. It is further stated that the Surgeon who performed the post-mortem examination "found traces of poisoning in the stomach;" but what these traces could have been we are at a loss to understand. A bottle was found containing a white powder marked "poison," and this substance, when analysed, is said to have been composed of strychnia and French chalk; and it is also said, that the deceased had taken some twelve or fifteen grains of the poison: "which," says the newspaper account, very *naïvely*, "fully accounts for her death." The Coroner remarked that this was a most extraordinary case; a servant woman procures a mixture of strychnia and French chalk, and swallows such a quantity of the powder as is equivalent to twelve or fifteen grains of strychnia; and with this enormous dose of veritable poison in her stomach, she quietly expires, and is found "in an easy and recumbent posture on the floor." If it should turn out that the case really presents an exception, in most of its striking features, to all the cases of poisoning by strychnia hitherto recorded, we think that Mr. Hazel, the Medical witness, would render an important service to science by presenting to the Medical world an accurate history of the appearances observed after death, together with the chemical analysis of the stomach and of the bottle found in the possession of the deceased. But, judging of the contents from the newspaper account, there is really nothing extraordinary in the case at all, or in opposition to what is known of the effects of strychnia. No one appears to have seen the deceased between the period of her swallowing the poison and her death, so that the presence or absence of convulsions must be equally matter of conjecture. The absence of rigidity after death really proves nothing; for the tetanic rigidity produced by strychnia is a manifestation of *vital* action; and the *rigor mortis* observed after death is probably due to ordinary physiological causes, quite independently of strychnia poisoning. In the recorded cases of such poisoning, the condition of the muscles, *after death*, is so variable as to rigidity or relaxation that it can lead to no conclusion whatever as to post-mortem rigidity being a peculiar effect of strychnia.

A paragraph has appeared in the papers during the week which must not be allowed to pass unnoticed. In many of the biographical notices which have been published of Dr. Paris, the following statement is made:—

"During the late war a melancholy evidence was afforded of 'the absence of the right man from the right place.' When there was found to exist a necessity for a supply of civil Medical men for the army in the East, the Minister-at-War sent for the late President of the College of Physicians of

London, and stated to him the wants of the Government, and told him he would place in his hands, as President of the College, all the Medical appointments, and that the Government would hold him and the College responsible for those appointments. Without, as was his duty to do, consulting the *conceiliarii* of the College on this duty, which for their country and their Profession they would have been proud to discharge, he refused to accede to the offer of Lord Panmure, who was obliged, as best he could among private Medical friends, to carry out his intention of sending a supply of Medical men to the seat of war."

This statement is entirely incorrect. Lord Panmure did apply to Dr. Paris, and Dr. Paris expressed his willingness to recommend Medical gentlemen for the public service, provided the Government would agree to insure them a pension on their return. This Lord Panmure would not accede to, and Dr. Paris accordingly refused to have anything more to do in the matter. Whether in so acting he did right or wrong, it is not for us to say; but it is clear that he pursued the course he thought most likely to secure the services of Medical men of high professional standing for the public, and to obtain a proper remuneration for them from Government.

A father, mother, and three daughters have fallen victims to poisoning at Tully, in Ireland, from having eaten salt horse-mackerel. On inspection at the inquest of some of the fish the family had been using, it was proved that they had not been salted before they had become putrid, and were consequently unfit for food. We have not received any account of the symptoms; but Mr. Tyner, the Surgeon examined, gave his opinion that the deaths were caused by eating fish in an unsound state. The verdict was curious:—"Died by the visitation of God, after eating some horse-mackerel which were not sufficiently cured."

Mr. Beadon, the magistrate at the Marlborough-street police court, has given a decision this week which will help to enforce the provisions of the Smoke Consuming Act. He fined a baker £5, and £5 costs, for not having any apparatus for the consumption of smoke applied to his oven. It is proved not only that it is practicable to consume the smoke from bakers' ovens, but that the means adopted ensure a large saving of fuel. We are glad, therefore, to find that the bakers have had a lesson they will probably remember.

A British merchant vessel, the Duke of Portland, carrying Chinese passengers between Hong Kong and the Havannah, lost 132 Chinese on the passage. What are the horrors of the middle passage in slavers to this? The facts came out at a police court this week, and we trust will lead to further investigation, and more stringent enforcement of the Merchant Shipping Act. Well might the magistrate say, "The English flag is disgraced by such traffic." The causes of death were entered in the log as "fever" and "exhaustion." Probably "scurvy" and "starvation" would have been nearer the truth.

We noticed last week a case of accidental poisoning by prussic acid. It appears that a druggist's assistant was making up a prescription for a lotion containing prussic acid, and serving castor oil at the same time, and that he put the prussic acid into the castor oil bottle instead of that containing the lotion. Prussic acid was detected in the remains of the castor oil, and in the stomach of the deceased, by Mr. Rodgers; and a verdict of manslaughter has been returned against the druggist's assistant, who has been committed for trial.

DR. LIVINGSTON.—This celebrated medical missionary was elected, on Monday, an honorary fellow of the Faculty of Physicians and Surgeons of Glasgow, having been a licentiate previously.

PRIZES FOR 1856, AT THE ACADEMIE DE MÉDECINE DE PARIS.—The prize of 1000 francs for the best essay on the Pathological Anatomy of Cysts has been adjudged to Dr. Bauchet; and Capuron's prize of 1000 francs for the best essay on Bloodletting in Pregnancy to Dr. Silbert. The Argenteuil prize of 12,000 francs for the greatest improvement in the treatment of strictures of the urethra, or of other diseases of the urinary organs, made between 1850 and 1856, has called forth as many as 21 competitors, so that the arbitrators are compelled to delay their decision until next year.

PRIZES FOR 1857.—1. The Academy prize of 1000 francs: "Determine by the aid of clinical facts the amount of the utility derivable from permanent exutories in the treatment of chronic diseases." 2. The question for the Portal prize of 1000 francs is, "Describe the organic changes produced by rheumatism, and the characteristics by means of which these may be distinguished from alterations due to other causes." 3. The question for the Civrieux prize of 1500 francs is "Nervous Vertigo. Carefully trace out its differential diagnosis, signalizing the signs which distinguish it from vertigo arising from plethora, anæmia, or organic cerebral lesion, and point out the special treatment it requires." 4. Capuron's prize for 1855 not having been adjudged, the subject is repeated again for 1857: "Sudden deaths in the puerperal state." This the Academy limits to the consideration of those cases of sudden death long observed to occur either in pregnancy, during or after delivery, without their being explicable by the ordinary and appreciable causes of sudden death. 5. Prize Question on Mineral Waters. "Characterize *saline* mineral waters; describe the sources that may be placed in this class; determine by medical observation their physiological and therapeutical effects; and distinguish the appropriate cases for their application in chronic diseases." (1000 francs.) 6. Lefevre's triennial prize of 1800 francs: subject, "Melancholy." 7. Barbier's prize of 3000 francs for the discovery of the means of curing diseases usually reputed incurable, as hydrophobia, cancer, epilepsy, scrofula, typhus, cholera, &c. &c. 8. The Argenteuil prize deferred to 1857, as already stated. The essays for all these prizes to be sent in by the 1st of March.

PRIZES FOR 1858.—1. The Academy prize of 1000 francs: "Give the history of the applications of the microscope to the study of pathological anatomy, and to the diagnosis and treatment of disease. Point out the services it has rendered to medicine, suggest those it may yet render, and provide against the errors it may give rise to." 2. Portal's prize of 600 francs: "On the pathological anatomy of ovarian cysts, and the consequences deducible for the diagnosis and treatment of these affections." 3. The Civrieux prize of 1500 francs: "Establish the differences between neuralgia and neuritis." The Academy recommends especially the establishment of the characters differential of neuritis, by the aid of experiments. 4. Capuron's prize of 1000 francs: "On the death of the child during labour." 5. Itard's triennial prize of 3000 francs to the author of the best work on practical medicine or applied therapeutics; such work having been published at least two years before. 5. Barbier's prize as in 1857.

MINERAL WATERS IN FRANCE.—The number of persons who resort to mineral waters in France is rapidly increasing. Thus Delpit calculated it at 30,691 in 1822, Patissier at 93,000 in 1852, and M. Mélier states that in 1855 it considerably exceeded 140,000. During 1856 it has become still larger. As might be expected, these numbers have especially increased at places where railways facilitate access. The number of baths taken at Vichy in 1841 did not amount to 42,000, while it has risen to 137,729 in 1855, and to nearly 145,000 in 1856. There were sent from Vichy in 1842 about 150,000 bottles of the waters, while the number is now rapidly approaching a million per annum. In 1822 the amount of capital put into motion by these establishments was calculated by Delpit at 3,788,850 francs, while in 1852 the Commission of the Académie de Médecine valued it at 27 millions, one-half being expended at the baths themselves, and the other on the expenses of the journey incurred by the sick and their attendants.

OUR GREAT ONES OF THE PAST.

MEN OF THE BRITISH SCHOOL.—No. IV.

JOHN CHEYNE, M.D., F.R.S., M.R.I.A.—Continued from page 20.

Dr. Cheyne had thus, within the short space of ten or eleven years after he had taken up his position as a candidate for public favour in Dublin, attained the highest professional position in the Irish metropolis. His remarks on the causes which led to his advancement, and on the means he adopted to maintain himself in the position he had gained, are as creditable to himself as they are likely to be beneficial to others, and we shall therefore lay a few extracts from them, *verbatim*, before our readers:—

“By a good arrangement, punctuality, attention to the interests and feelings of my professional brethren, and prudence—the means which had apparently led to my advancement,—I now tried to avoid those reverses to which professional life is ever subject.

“As I was much more generally employed as a consulting than as an attending Physician, I endeavoured to escape interruption in my chief line of business. I returned to my house at appointed times, to form new engagements, but I left no account of my route when I set out from home.”

In another place he says:—“Punctuality precludes the necessity of explanations and excuses, often awkward, and, more frequently than we are aware of, not strictly true. Punctuality is considered by junior and subordinate members of a Profession as manifesting a respect for their feelings and occupations; it is felt to be a compliment, and it is a compliment in which there is no surrender of truth.”

And, again:—“I always endeavoured to prevent changes of the Medical attendants in a family, unless in cases of obvious neglect or ignorance; and, even then, I never hinted at a substitute. If requested by a patient to recommend a Surgeon, Accoucheur, or Apothecary, to attend in his family, I mentioned the names of three or four men of established character, and advised my patient to discuss their merits with his friends, and decide at his leisure.”

Again, he says:—“Physicians are oftener deprived of the goodwill of their patients by paying what are deemed unnecessary visits than by neglect. I know no way of avoiding this evil but by an explanation before the Physician takes his leave; if there be any doubt relative to the expediency of an additional visit, it ought then to be cleared up. If a future visit appear necessary, it is better that it should be fixed by the patient himself, or his family, than by the Physician; and by a little address this can generally be brought about without difficulty. After I was established in extensive business, it was understood that I never returned to a patient unless when required to do so; and this simple rule materially contributed to my comfort, as it completely removed from me the imputation of making superfluous visits, which I have known brought against Physicians who were incapable of so improper a proceeding, but who were less alive than they ought to have been to the unworthy suspicions of some of their patients.

“The Physician who possesses the confidence of the public is able, in an extensive class of obstinate diseases, to effect improvements in the health of his patients, which appear to the ignorant almost miraculous. The cases to which I allude are those in which disease, however occasioned, is prolonged by depression of the mind, which excludes all hope of recovery. In such cases a Physician, unless he obtains dominion over his patients, so far from affording relief, fails in every prescription; nay, prescriptions, unexceptionable in all respects, appear uniformly to aggravate the symptoms, which in general they alleviate. The Physician is felt to be a chief cause of the patient's suffering; but, instead of looking to those influences which improve the general health, such as a proper regimen, air and exercise, change of scene, and amusements which do not exhaust the spirits—he is led by disappointment to the exhibition of medicines more and more active, till the patient, in despair, refuses all further aid, or seeks help from some other quarter, or very generally, if affluent, goes to the metropolis to consult the Radcliffe or the Mead of his day. A

popular Physician, with a composed yet decided and rather unyielding manner, to such a patient appears almost like a ministering angel. The most obvious directions appear like words of inspiration; the merest ‘placebo’ that was ever stuck upon an apothecary's file is a panacea, or is combined with consummate skill, and restores health and enjoyment of life. I have witnessed many of these *Hohenlohe* cases, as they are called in Ireland. In Dublin, many a patient under my care has been restored to health by the same means which have signally failed in the country; thus, in certain cases, reputation promotes success, and success continues to uphold reputation.”

After some remarks on the various causes of the mutability of Professional fortune, Dr. Cheyne continues:—

“The course of my prosperity was at last arrested by the failure of my health. In the year 1825, when I was about to enter on my 49th year—a period which is often critical to those who are engaged in anxious business—I became affected with a species of nervous fever. In the autumn of that year dysentery proved fatal to many of the inhabitants of Dublin; disappointment often attended the means which I employed for their relief, and a pretty constant depression of spirits was the consequence of unsatisfactory practice; at the same time my mind was harassed by anxieties not connected with my Profession. I became so weak that I was not able to dress in the morning till I had had coffee; and when I returned from a day of toil, at seven or eight o'clock in the evening, I was obliged to go to bed to obtain rest before I was able to dine. After a struggle of two months, I went to England, where I recovered some strength, and thought I was again able for business, to which I returned too soon. I found one of my most esteemed professional friends, the father of fifteen children, labouring under a disease which ultimately proved fatal. He had awaited my return, in order to put himself under my care. His sufferings proved an incubus on my spirits, which strangled every cheerful thought. I now began to comprehend the nature of my own illness: a climacteric disease was forming, which ever since has been slowly executing its appointed mission.

“By relaxing as much from care as I could, sleeping out of town, getting an experienced friend to act for me at the General Military Hospital, and confining myself to the duties of inspection, the progress of my illness was retarded, and I continued in Dublin till the beginning of 1831, when Medical practice at last proved an intolerable burden; my sleep was broken and unrefreshing; in the morning I was languid and dispirited, and in the evening I had a high degree of nervous fever. I resolved upon relinquishing business and retiring to England, at a time when, had my health been unimpaired, I might, in all probability, have retained my practice undiminished. I found my conclusion of its stability partly on my income in 1829 and 1830. Between the 1st of February and 31st of May, 1829, I received £2230, which was more than I had ever received in any period of equal duration. But my chief reliance was on the undiminished good-will of my professional brethren, from whom I received the following addresses, when they understood that it was not my intention to return to Dublin:—

“‘Dublin, March 7, 1831.

“‘Dear Sir,—We, the undersigned Fellows, Honorary Fellows, and Licentiates of the College of Physicians in Ireland, impressed with the deepest sentiments of esteem for your private virtues, and respect for your exemplary professional character, beg leave to address you on the only subject connected with your long career of public life that has caused a feeling of sorrow in our minds.

“‘We cannot but deeply lament the absence of one who, while occupying for many years the very first rank in his Profession, equally maintained its respectability and protected our interests. In you we have witnessed the enlightened Prac-

tioner and experienced the disinterested friend. Faithful alike to your patients and your colleagues, you became pre-eminent without exciting jealousy. Your extensive information and sound practical judgment, the candour and kindness which you have ever shown to your brethren, and the sterling integrity and dignified deportment which have always been conspicuous in your intercourse with every member of the Profession, have so fully commanded our highest esteem and unlimited confidence, that we should hail with sincere pleasure your return to that important station amongst us which you have so long and so deservedly occupied.

"We beg you to accept the assurance of our increasing regard, and of our anxious wishes for your welfare."

The above address was signed by forty-five of the most eminent Physicians practising in Dublin.

The second address alluded to was the following:—

"SIR,—We, the Apothecaries of Dublin, have this day assembled at a General Meeting, in order publicly to express sentiments which we have long entertained towards you in private.

"To convey these sentiments to the full extent in which they are felt would be to us most agreeable, to you, perhaps, painful. Although convinced that truth is not flattery, we sacrifice our feelings to yours, and we suppress a part of what it will ever give us pleasure to declare, when the occasion is more opportune than the present.

"Permit us, however, to express, as our unanimous opinion, founded on the long acquaintance with you which we have had the pleasure of enjoying, that among those who within our recollection have occupied the prominent station of head of the Profession of Medicine in this metropolis, not one has ever ranked higher in acquirements, in Professional integrity, or in those qualifications which constitute the gentleman.

"Allow us, therefore, to profess a sincere friendship, founded on esteem of your qualities, and admiration of your talents; and believe us, when we declare, that in the community there are none who feel a more ardent wish for your happiness and welfare than,

"Sir, your attached friends,

"The Apothecaries of Dublin,

"M. DONOVAN, *Chairman*.

J. LEECH, *Secretary*."

"April 9th, 1831.

Dr. Cheyne's chosen retreat was an estate he had some time before purchased in the neighbourhood of Newport Pagnell, in Buckinghamshire; here, being, as he himself informs us, of the opinion of those who think it better to wear out than to rust out, and seriously apprehending the consequences of want of suitable occupation to a mind which had been long in a state of excessive activity, he immediately devised such employment as might be not inconsistent with health slowly declining, and with diminished power of application. Three mornings in the week he went to a neighbouring cottage and saw the sick villagers, giving them advice, and dispensing medicines which were prepared in his family; and thus many an attack of illness was nipped in the bud, and much suffering lessened. On a fourth morning the sick came to him from distant parts of the country, for whom he prescribed; and as there was no Physician within twelve miles of the post-town nearest to his house, he was occasionally consulted by some of the more respectable families in the neighbourhood. He also visited those of the sick poor who were confined to their homes, supplying them not only with medicines, but with soup and other nourishment. During his residence at Sherington he was solicited by a number of influential members of the Profession in the metropolis to settle in London as a Consulting-Physician.

The following letter, addressed about this time to his intimate friend, Dr. Croker, to whose kindness we are indebted for permission to use it, is interesting as exhibiting the feelings of the writer during his retirement:—

"Sherington, Newport Pagnell, Sept. 6, 1832.

"My dear Croker,—Many thanks for your very kind and friendly letter. It would give me great pleasure to be among you again, but I am no longer capable of exertion, and should be unwilling to lose character by an unbecoming effort. The truth is that my health is unconfirmed; and, although I still have pleasure in my profession, and could probably write one lecture better than I could have done twenty years ago, when I was appointed Professor in the College of Surgeons, a second would knock me up. I am quite unequal to any course

of study, and could not bring myself to undertake a duty which I had a doubt of being able to perform.

"Many thanks, my dear friend, ever yours affectionately,

"Mrs. Cheyne's best regards.

J. CHEYNE.

"Dr. C. P. Croker, Merrion-square west, Dublin."

A very intimate Medical friend of Dr. Cheyne, Dr. Adair Crawford, who visited him in 1833, describes his state as then presenting the symptoms of climacteric disease: his pulse was habitually over 100; he suffered much from thirst, and at night from wakefulness, yet withal during the day he was remarkably cheerful, and greatly enjoyed his country drives.

The progress of disease, however, continued uninterrupted, for Mrs. Cheyne, subsequently writing to Dr. Croker, says:—"You would grieve, I know, to see the ravages this low nervous fever has made in your old friend. I could hardly conceive life to remain under such emaciation; and, were it not that he is able to take nourishment, I hardly think it could. His mind loses its power of *continued* thought, from weakness and drowsiness, but it is *unimpaired*, and as firm on the matter of religion as when in full vigour. Medical subjects he seldom looks into; indeed, the bent of his mind seems to be to scriptural subjects."

Dr. Cheyne devoted a considerable portion of his retirement to literary labours; and during that time composed, not only the articles in the "Cyclopædia of Practical Medicine," which bear his name, viz., those on croup, epilepsy, epidemic gastric fever, laryngitis, and wakefulness; but also the Essays on partial derangement of the mind in supposed connexion with religion, to which his son prefixed the autobiographical sketch whence we have drawn so largely, and which essays had the advantage of the editorial care of the Rev. Charles Graves, D.D., Fellow of Trinity College, Dublin, who had married a daughter of the subject of the present memoir. Dr. Cheyne's reasons for undertaking the former task are given in the last paragraph of his autobiography:—

"A charge is often brought against Physicians that, after they have gathered in their own harvest, they never think of showing how the ground may be cultivated by others. I wished to prove that I still retained an interest in my Profession, even after it had ceased to yield me emolument; and, therefore, I gladly undertook to write some articles for the 'Cyclopædia of Practical Medicine,' in compliance with the request of Dr. Tweedie, one of the editors of that work. I was thus, again, led to the use of my pen, and began to extend my inquiries to other subjects, recollecting and recording facts and reasonings which, in the hurry of business, I had almost let slip; but an end was soon put to my employment by the formation of a cataract in my right eye in the beginning of 1833, which soon deprived me of the use of that organ; and, since that period, the eye has become so dim, and my strength so exhausted, that I have altogether ceased to exercise my profession."

The foregoing was penned in October, 1835, about three months before his death. The general breaking up of his constitution, which hitherto had been secretly progressing, exhibited itself definitively in mortification of the lower extremities; and after a confinement to bed of six weeks, he died on the 31st of January, 1836.

In the month of March following a biographical notice of the subject of this memoir, from the pen, we believe, of the late Dr. Houston, was published in the *Dublin Journal of Medical Science*. After speaking of Dr. Cheyne's penetration in the diagnosis of disease, his readiness and sincerity in communicating his experience, and the consideration with which he always treated his Professional brethren in consultation, the writer observes that the presentation of addresses to him from three different branches of the Profession, on his retirement from practice, "requesting him to return, and to resume his station among them, was a compliment to an individual unprecedented in the annals of medicine." The sensitive nature of his mind is illustrated by an expression to a friend, made use of in allusion to the peculiarity of his practice as a consultant in the latter years of his Professional career. "I have this day," said he, "visited for the first and last time more than a dozen persons, not one of whom may be in existence to-morrow. I can no longer bear it; I must fly from such scenes of hopeless and helpless affliction;" a declaration he soon verified by his retirement. The deep but silent interest which he took in the afflictions of his patients was often proved; for frequently has the widow or orphan received from an anonymous hand a restitution of the fees paid to Dr. Cheyne for his Professional services, with, perhaps, an increase of the amount

to prevent a possibility of a conjecture as to the quarter from whence the donation was derived.

The pure and undefiled source from which his Professional uprightness, his consistent demeanour, his genuine philanthropy, and the vast moral influence he exercised on all around him flowed, shedding a lustre on, and elevating the character of the Profession he adorned, may be best discovered in the written testimonies he has left. In a letter to a friend he says:—"There is but one subject on which I can dwell with satisfaction, connected with that permanent state of being on which, to all appearance, I must soon enter. On this subject my views, which are very simple, lead to hope and peace, and give to my existence a comfort much beyond what I experienced in times of wealth and prosperity. Oh! that all my friends could discover my panacea, which is to be gathered only on Calvary (a)."

[To be continued.]

REVIEWS.

The Prostate Gland, and its Enlargement in Old Age. By DECIMUS HODGSON, M.D. Edin., M.R.C.S. Eng. London. 1856. 8vo. pp. 84, and 12 plates.

THIS monograph professes to give in some detail an account of the healthy anatomy of the prostate gland, and the morbid changes which it undergoes in old age. It is founded upon the inaugural dissertation of the author, for which a gold medal was awarded by the University of Edinburgh at the annual graduation there in 1855, and it is illustrated by twelve beautifully executed lithographs. The treatise may be considered as dividing itself into three parts. The first part (which occupies half the volume) is devoted to the descriptive anatomy and relations of the prostate gland, and is given for the benefit of "younger readers, or those gentlemen who may desire to refresh their memory on this subject." The second part is pathological; and the third part is devoted to the treatment of enlarged prostate by catheterism and otherwise.

The first part is certainly distinguished by accuracy of detail and careful description. In the second, or pathological part, two forms of hypertrophy are particularly noticed, and one of these is more minutely described. The first is denominated "parenchymatous hypertrophy," in which the interglandular substance of the prostate is the site of the increase of material. The second form is termed "glandular hypertrophy," and it seems to be the main object of the treatise to make out this form as a "swelling or hypertrophy of a unique nature," and which is peculiar to old age.

Preparatory to the description of this glandular hypertrophy, it is assumed in the first part of the volume (p. 32), that the prostate gland is developed from the mucous glands of the urethra and neck of the bladder, and this hypothesis is grounded on the following considerations, namely, the simple nature of the gland; the termination of its secreting surface in the prostatic urethra by several orifices; the growth of fresh glandular tissue with ducts and orifices peculiar to itself; and, lastly, the existence of a rudimentary prostate in women, consisting of mucous follicles. Moreover, it is assumed that the vesicles and ducts of the prostate are formed as in other glandular structures. Now, these are undoubtedly the points of the greatest interest in the inquiry, and they ought not to have been assumed. They ought to have been proved or disproved. A complete investigation ought to have been made, by repeated examinations of the prostate, or the rudiments of that gland as they may be seen in the embryonic and foetal life of animals. The results of such an inquiry would have constituted the most fitting introduction to elucidate the nature of the "glandular hypertrophy;" but, instead of results worked out, the questions are left *in statu quo*. In the second part, the general and well-known pathological features of prostatic hypertrophy are very well detailed, and the book bears evidence of proceeding from a careful and diligent student.

(a) Dublin Journal of Medical Science, Vol. IX., 1836, p. 173. In a work entitled, "A Lamp to the Path; or, the Bible in the Heart, the Home, and the Market-place," by the Rev. W. K. Tweedie, D.D., Free Tolbooth Church, Edinburgh. T. Nelson and Sons, London, Edinburgh, and New York, 1855, Dr. Cheyne is singled out as an "example of a devout Physician," exhibiting "the ascendancy of pure and undefiled religion in his life and death."—p. 165.

The third part of the volume, on the treatment of enlarged prostate, is full of sage and safe advice, but such observations require to carry with them the force of extensive experience.

BOOK NEWS.

The second edition of Dr. Fuller's excellent work on *Rheumatism, Rheumatic Gout, and Sciatica*, has just appeared, considerably enlarged. The chief additions are in the chapter on Rheumatic Gout, which Dr. Fuller considers to be an affection partaking "in part of the nature of rheumatism, in part of that of gout, but not identical with either." He has seen it as a sequel of acute rheumatism. The morbid anatomy is that of the affection known as "chronic rheumatic arthritis," but the symptoms are referred to "the agency of a specific poison altogether distinct from, though closely allied to, the materies morbi of rheumatism and gout." Analysis shows the absence of lithic acid in the blood and secretions; and Dr. Fuller argues from analogy that "lactic acid, or whatever may be the materies morbi in true rheumatism," is not present; but he gives us no sort of chemical demonstration of the claims of rheumatic gout to be considered as a special disease. It will be seen that Dr. Fuller's views of the nature of rheumatic gout differ entirely from those of Dr. Garrod and of Mr. Spencer Wells. The subject is one open to much discussion; and whatever we may think of Dr. Fuller's views, we can cordially recommend his book as an excellent practical treatise on the important class of diseases which he has so carefully observed.—Dr. Copland has issued a pamphlet on the *Drainage and Sewage of London and of Large Towns*, in which, after treating on the injurious effects of imperfect drainage, and pointing out the difficulties and dangers which would attend the application of Mr. Bazalgette's plan, he recommends that the drains on both sides of the Thames should open into deodorizing reservoirs constructed in several places on the banks of the river, the purified sewage water being allowed to flow into the Thames, and the manure being conveyed away for agricultural purposes. Dr. Copland's proposition will, no doubt, meet with due attention from the Government Commission now investigating the subject.—Dr. Bozeman, of Montgomery, in the United States, has sent us a copy of his pamphlet on *Vesico-Vaginal Fistulae*, containing a full account of his mode of suture, which is now attracting considerable attention in London, the operation having been performed by Mr. Baker Brown with complete success in one case, and by Mr. Spencer Wells with partial success in a very aggravated case. As the operation, however, has been described at some length in our Hospital Reports, we need not do more at present than express an opinion, which future experience may possibly modify, that the button is by no means a useful addition to the silver wires and shot which form the really essential parts of the suture.—Dr. James Williams has published a small work on the *Topography and Climate of Aspley Guise, in reference to their influence upon health and disease*. His attention was first directed to this village, from the circumstance that he purchased a practice there when in search of improved health himself; and he was thus led to examine the locality with particular reference to its sanitary aspects. He has formed a very high opinion of the climate of Aspley, which he regards as superior to that of many places which are highly in esteem, and equal to any either in this country or on the continent. The chief recommendations of Aspley consist in its dry and sandy soil, the exceedingly equable character of its climate, and the beauty of its scenery.—Sir James Eyre has presented to the world a fourth edition of *The Stomach and its Difficulties*, and in his Preface he thanks the public for the popularity which his work has obtained, and regrets the "difficulty" of supplying with sufficient rapidity the constantly increasing demand for copies.

ANOTHER CONVERT TO MESMERISM.—"It may be all very fine to disbelieve mesmerism in connexion with the Broadstone tragedy; but does any one whose opinion is worth having disbelieve mesmerism *per se*?" * * * "The pig and the poesy of clairvoyance in Ireland might be left to themselves."—*Dublin Medical Press*, January 7.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

EXPERIMENTS UPON THE RENAL CAPSULES.

By M. BROWN-SÉQUARD and Others.

Dr. Addison's investigations into the diseased condition of the renal capsules have among other results had the effect of recalling attention to the functions of, and amount of importance to be attached to, these organs. As usual, in France these questions have been sought to be settled by multiplied vivisections; and already numerous communications detailing the results of experiments upon animals have been laid before the Academy of Sciences, the reports of such results being somewhat at variance with each other.

M. Gratiolet states that his experiments upon guinea-pigs go back to 1853-4, and the present discussions have induced him to publish the results. He found that when the left capsule alone was removed that neither death nor convulsions necessarily resulted; but when the right and, *à fortiori*, when both were removed death always took place. He believes this arises from the anatomical relations of the right capsule with the liver and vena cava inferior, which render the operation as dangerous as it is difficult.

M. Phillipeaux reports that extirpation of both capsules in the albino rat does not necessarily cause death; for in four of these animals in whom he successfully extirpated both, no important functional disturbance resulted. He believes that when death has resulted it has done so from the operation itself, which is a severe one, and may be followed by fatal inflammation of the peritoneal cellular tissue, peritonitis, or interstitial hernia through the divided muscles.

In connexion with this communication, we may notice another made to the Academy by Dr. Martini, who relates the case of a man dying of phthisis at the Hospital for Incurables at Naples. The two kidneys, instead of occupying their normal position, were found fused into a single body, lying on the promontory of the sacrum. This body received a single emulgent artery, which divided into four branches, having corresponding veins also uniting into a single emulgent vein. Two very short ureters of the usual calibre proceeded to the bladder. The structure of the kidney was normal. Not a trace of renal capsules could be discovered, although, as the author was aware of Addison's researches, he made careful search for them.

M. Brown-Séguard's communication, since expanded by him, enters into minute detail. After taking a review of the state of science in regard to these bodies prior to Addison's researches, he details the results of his experiments. All the animals in which he has extirpated, crushed, or even pricked at several points both capsules, have died soon after the operation. Of 51 rabbits in which the precise time of death was noted, the mean period of survival was found to be nine hours and some minutes; the minimum, five hours and a half, and the maximum (in 1 only), fourteen hours and a half. In dogs and adult cats the survival was somewhat longer, the mean period being fourteen hours, while in guinea-pigs it was thirteen hours. He thinks the longer period of survival observed by Gratiolet was due to his employing young animals, in which the survival is longer; and in his own experiments he found that in very young cats and dogs its mean rose to thirty-seven hours. The mean period of survival in the 90 experiments performed on the various animals was seventeen hours and a half, the mean for adult animals being about twelve hours, for very young animals, thirty hours. When only one capsule is removed or injured the duration of life is somewhat longer, but, although death in this case is not inevitable, it is very frequent, inasmuch as only 2 out of 37 animals survived. The supposition of Gratiolet, that abstraction of the right capsule is always fatal, is not borne out by a more extended observation.

Having detailed these results, M. Brown-Séguard next proceeds to give a description and explanation of the phenomenon produced:—

Influence exerted on animal and organic life.—1. There is a notable debility produced, differing from that merely due to the pain of the operation, which is temporary. It gradually increases, and becomes excessive as death approaches. 2. The

respiration and circulation undergo important modifications. The respiration may be temporarily increased in frequency while the beats of the heart are diminished. At a somewhat more advanced period, the reverse of these conditions prevails; while, as the case proceeds, the frequency of both diminish. In the immense majority, the force of the heart's pulsations are notably diminished during the whole period of survival, and especially towards its latter part. 3. The appetite quite disappears; and, if the animal has eaten before, digestion is arrested, but there is rarely vomiting. 4. The urinary secretion remains normal. 5. The temperature generally becomes diminished, and especially in winter, when rabbits towards the end will lose 4° or 5° C. in a room at 10° or 12° C. 6. Sensibility persists to the last, and even seems exaggerated. 7. Delirium and convulsions are among the principal phenomena, the latter being sometimes very violent, and manifesting themselves either under the tetanic or epileptic form.

Nature of the ensuing death.—Death takes place sometimes from asphyxia, sometimes from syncope; and the asphyxia may take place either suddenly or gradually. Not infrequently, some time before death, in place of convulsions, a turning movement is set up, or the animal rolls alternately to the left and right, as after certain lesions of the encephalon.

Pigmentary matter and peculiar crystals found in the blood.—The co-existence of the deposit of pigment in the skin and changes in the capsule in the human subject, gives much interest to the fact of the author having found a notable increase of the normal pigmentary matter in the blood of the animals operated upon. No increase of pigment has been found in the skin of these animals. Blood collected from animals who have undergone the ablations exhibits the rapid spontaneous formation of crystals. They are especially met with in the blood of the inferior vena cava, and differ in character from hæmatoidine.

The cause of death.—In this section the author passes various possible causes of death under review, such as traumatic peritonitis, hæmorrhage, lesions of the liver or kidney, phlebitis; and comes to the conclusion, that this speedy death is not the result of any of these, or even their combination, and shows by numerous comparative experiments, that survival from these causes of death would be more prolonged. In like manner, though he believes that injury to the filaments coming from the semilunar ganglion may co-operate in producing the fatal results, these are not due to it alone; for great injury done to the portions of the sympathetic, whence the supply for the capsules is derived, is followed by a longer survival than in the case in question. As death cannot be explained by any of these causes, we arrive by exclusion at the ablation of the capsules, an inference rendered more probable by certain facts. When death follows the removal of only one capsule, the convulsions that ensue are generally stronger on one side, and the rolling movement, which is frequently observed, almost always commences on the opposite side. Not infrequently, in rabbits, the pupil corresponding to the side on which the ablation has been made is more contracted than the other.

The Pigmentary Disease in Rabbits.—During the last twelve years M. Brown-Séguard has observed a very large number of rabbits die of a disease characterised by peculiar symptoms. For a long time he attributed its production to the presence of the ova of a species of helminthus, so constantly found in the liver of the Parisian rabbits, that he has never failed of finding them in 500 rabbits he has examined. The intensity of the disease seemed to be proportionate to the amount of destruction of the liver produced: while in the rabbits in America, in which these ova are not met with, the disease is also unknown. Still, farther observation has not always shown this coincidence between the state of the liver and the production of the disease; and the author's attention having been directed by Addison's researches to the condition of the renal capsules, he has found remarkable alterations in these bodies, some of which seem to be constant. The cortical substance, from a canary colour becomes of a chocolate colour, or of a more or less deep reddish brown, a *ramollissement* of the substance, and a dilatation of the capillaries being also observed. Such changes were observed in 26 out of 28 rabbits suffering from pigmentary disease. The symptoms observed have a marked resemblance with the phenomenon produced by the ablation of the capsules. In these animals there is accumulation of pigmentary matter in the blood. This, in the author's opinion, has induced irritation of the capsules, the

function of which in the normal state consists in producing modifications in this pigmentary matter. The function of these glands being thus impeded, a still greater accumulation of pigmentary matter ensues, and death rapidly takes place in consequence, among other causes, of the obstacles which the pigmentary masses present to the free circulation of the blood in the capillaries of the nervous centres.

The Results of the Experiments and the Pigmentary Disease compared with Addison's Disease.—M. Brown-Séquard believes that the facts published by Addison and Hutchinson receive powerful illustration from the above experimental and pathological observations. Among the symptoms observed in the human subject there are two that have always been found, an impairment of voluntary motion and a discoloration of some part of the skin. In animals the debility is very remarkable; and if their death is too rapid to allow of the pigment being deposited in the skin it is found in the blood. A disordered state of the nervous system and loss of appetite are other symptoms often common to all these categories of facts.

Functions of the Supra-Renal Capsules.—Prior to Addison's observations, all that physiologists had established with regard to these bodies was, that they exerted a modifying power upon the blood, and differed from glands having ducts, inasmuch as they eliminated nothing. Addison's observations and the author's experiments lead to the conclusion that these organs are essential to life. Indeed they seem more so than do the kidneys themselves, survival being longer after ablation of the latter. It is extremely probable that one of the functions of the capsules consists in the special modification of an unknown matter capable of transformation into pigment, and that the modification exerted on this matter by the capsules prevents such transformation. This would not seem to be the only function they exercise, for the spontaneous production of crystals in the blood of animals deprived of the capsules, and the prompt disappearance of globules, show the great alteration this fluid undergoes. Other experiments made by the author, and hereafter to be related, show that the blood of animals deprived of the capsules often acts as a fatal poison when injected into the veins of animals of the same species.—*Archives Générales*, October and November, 1856; *Comptes Rendus*, Tome XLIII. Nos. 8, 9, 19, and 22.

GENERAL CORRESPONDENCE.

DR. RAMSBOTHAM AND DR. CHURCHILL.

[To the Editor of the Medical Times and Gazette.]

SIR,—Dr. Churchill's letter in your Journal of the 3rd instant requires me reluctantly to trespass on your columns again.

Dr. Churchill remarks, that if he copied any of my plates he has quite forgotten that he did so, or which they were; he thinks it quite possible that he did, but of one thing he is quite sure, that he did not know that any of them were original. Those six plates in his book which I pointed out in my former letter (December 27) speak for themselves, and show plainly they were copied from mine; and I take leave to say that Dr. Churchill ought to have been sufficiently well acquainted with the literature of the science he professes, to have known that they were entirely original, that none like them had ever appeared before, and that they had only been published a few months.

Dr. Churchill goes on to say, that in copying my plates he was only following my example, because I had copied a few also without acknowledgment. This reasoning I cannot admit, because, although I have not given the name of the author in every instance, I have, as I said before, mentioned it in connexion with some other or others that I had copied; whereas Dr. Churchill took mine, as, indeed, he did Maygrier's and Moreau's, without directing the reader to the original designer in any one case. Besides, there is surely a great difference between taking to our own use illustrations that have been a considerable time before the Profession, and others that have only just made their appearance.

Dr. Churchill says, to the best of his belief the ossa innominata, sacrum, and coccyx in his book were copied from Moreau, "as any one will conclude who consults the work." I beg to differ from Dr. Churchill here most materially; for

there are many discrepancies between the portraits of the bones as given by Dr. Churchill and Moreau; whereas they are identical with mine in size, and every other feature, except that what is the left os innominatum in mine becomes the right in his, and *vice versa*, which would necessarily occur if my cuts had been copied on the wood as they appear on the paper. The difference between the sacrum as delineated by Moreau and Dr. Churchill is so great that it might be doubted whether they were intended to represent the same bone; while Dr. Churchill's is the exact counterpart of mine. The side view of the skeleton-trunk also, with the lines showing the two axes, must have been taken from mine, as there was no engraving like it extant. Dr. Churchill advances that, perhaps, I copied my bones from Moreau; I had already stated that they were drawn from nature.

Again, in regard to the instruments, Dr. Churchill affirms, they were drawn from instruments which he brought from Edinburgh, as those recommended by Dr. Hamilton, in 1852; and adds, "Perhaps Dr. Hamilton copied them from *him*." Here is a very singular coincidence; for not only are the long and short forceps, and the vectis, exactly of the same pattern as mine, but they are of the same size as in my book, and the same view is given of them, except as before; for what is the right blade in mine becomes the left in his. The short forceps is Denman's; and when I was a pupil of Dr. Hamilton's, in 1821, unless my memory greatly deceives me, he repudiated Denman's short forceps, because it was straight, and used to recommend one of his own that had a lateral curve. The long forceps is my own; and I first published its size and pattern in the *Medical Gazette* in June, 1834. Since many copies, however, had been made before that time, it is possible that one might have got into Dr. Hamilton's possession. Dr. Churchill has certainly published four *craniotomy* instruments, not in my book, besides others that are the same as mine. These four may be the instruments he speaks of as having been brought from Edinburgh, and he may have forgotten, also, having copied any from me. Again, Dr. Churchill says, he never knew the decapitating hook was my father's; that he took it from Dr. Davis's book, believing it to be his own. Dr. Davis, in his "Operative Midwifery," where he has given a drawing of it, mentions it, at page 335, as the "edged hook of Dr. Ramsbotham;" and in his "Obstetric Medicine," he says, page 1173, "The instrument is one which my friend and colleague, Dr. Ramsbotham, has been in the habit of using; in giving his kind permission to take a drawing of it, he," etc. The hook is delineated in this work of Dr. Davis's also, and as my father's name occurs three times in the same page of very large print, in connexion with it, the most cursory glance would have been sufficient to dispel Dr. Churchill's ignorance on this point had he only turned to the page next the plate.

After speaking of what he chooses to designate my "virtuous self-complacency," Dr. Churchill begs to ask me, whether my request to Dr. Montgomery, to be allowed to copy one of his plates, was made before or after the plate was engraved. I can only construe this question into a most groundless and gratuitous insinuation that I copied Dr. Montgomery's plate first, and asked permission afterwards. It is not very probable that I should have permitted the expense of engraving the plate to be incurred, unless I was sure of being able to use it.

Dr. Churchill thinks it would have been "more simple and straightforward if I had applied to him privately, instead of laying the subject before the Profession." Very likely he may; but, in my judgment, it was not fitted to be settled privately. Both books are before the public; so short an interval intervened between the appearance of the two—about a year and a half—that, as I before remarked, confusion might have arisen as to whether Dr. Churchill or I had originally designed the plates in question. That fortunately cannot exist now, as Dr. Churchill lays no claim to originality in regard to any of his illustrations; but "frankly confesses he made the best selection he could from works on Anatomy as well as Midwifery."

But Dr. Churchill "would like to know why this charge against him has slumbered so long, and he cannot understand the delay." I will tell him. In the volume under review, he published some statistics in Midwifery, in which he mixed up the selected cases of Smellie, my father, and others, with the unselected cases of Dr. Collins, his own, and others. By these

tables he made my father's practice appear in a very unfavourable light; for instance, they show—Flooding cases:—Ramsbotham, 69; mothers lost, 30; Churchill—cases, 25; mothers lost, 0. Transverse cases:—Ramsbotham, 27; mothers lost, 6; children lost, 18; Churchill—cases, 9; mothers lost, 0; children, 5. Forceps cases:—Ramsbotham, 11; mothers lost, 3; children, 5; Churchill—cases, 9; mothers lost, 0; children, 0. Almost as much difference was shown as to the successful result in all the other complications of labour. Now, as my father's cases were selected for publication for the very reason of their being more than usually difficult and dangerous, to class them with unselected cases was most unfair to his fame as a Practitioner. It was also leading the Profession astray, by giving erroneous averages as results. To prove this I will merely mention that, in eighteen successive years, from January 1, 1820, my father employed the forceps 104 times, and only four of the women died. I thought it quite right to vindicate my father's character, as well as necessary to put the Profession on their guard against Dr. Churchill's delusive statistics. This I did at the time in a letter to the *Medical Gazette*. I did not choose to mix up my own "grievance" with this question then, for many reasons; but the very proper notice which you took of a case of plagiarism a few weeks ago, induced me to follow up the subject as one which, in these book-making days, I think it highly necessary to keep before the attention of the Profession.

I shall conclude by reminding Dr. Churchill that jocularity is no answer to preferred complaint; and that levity and banter are weapons constantly had recourse to when the cause is bad, and there is a dearth of argument. I am, &c.

FRANCIS H. RAMSBOTHAM.

7, Portman-square, January 6, 1857.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

DECEMBER 16, 1856.

Mr. ARNOTT, President, in the chair.

Dr. WILKES exhibited a specimen of

COMPLETE DESTRUCTION OF THE PULMONARY VALVES FROM DISEASE.

A girl, aged 11, lately died in Guy's Hospital under the care of Dr. Owen Rees. She was said to have been ill from birth, and was with difficulty reared until the age of three years, when her health improved and remained tolerably well until a year before her death. She then, from taking cold, was laid up with pains in her limbs and chest symptoms. On admission the girl did not appear very ill. She had shortness of breath and a loud systolic bruit was heard all over the cardiac region, with a diastolic bruit over the sternum and towards the right side. There was no hæmoptysis, no dropsy, and no appearance of cyanosis. Purpuric spots appeared on the body during the last few days of life, but no other remarkable symptoms denoting the formidable disease affecting the pulmonary vessels which was seen after death. Upon post-mortem examination the heart was found as large as an adult's, owing to the increased size of the right ventricle. The pulmonary artery and its branches were completely filled by a firm fibrinous clot, closely adherent to its walls, of a whitish colour, and evidently of some days' or weeks' formation. Upon raising this up, the lining membrane of the vessel, as far as its commencement, was excoriated and covered with a firmly adherent lymph, and upon looking for the valves not a vestige of them was to be found. The foramen ovale was widely open. There were also recent vegetations on the aortic valves. It would appear that this child had had endocarditis about the time of birth, a short time before or afterwards, and that a certain amount of destructive disease at the pulmonary orifice had then occurred; and that a year before death, owing to a fresh rheumatic attack, their complete obliteration took place, and at the same time vegetations formed, and coagula were deposited, until the vessel became completely filled, and life could no longer continue.

Dr. BRISTOWE exhibited

A DISEASED LIVER,

which displayed a considerable amount of earthy degeneration,

taken from a boy 16 years of age, who had died of dropsy after scarlet fever. The liver was of the ordinary size, but its capsule was a little opaque. On section, the substance of the organ was found to be studded with spots and streaks, and in some parts an imperfect network of buff-coloured material. These deposits were hard and gritty, and looked to the naked eye like ossified vessels. Under the microscope, it was shown clearly that the deposit was earthy, for it dissolved with effervescence in acetic acid. It did not appear to have any connexion at all with vessels; but there was every reason to believe that it occupied the interior of the liver cells, for it existed under the form of angular, refractive, colourless masses, of the same size, for the most part, as the liver cells, similarly arranged, and evidently occupying spaces which had originally been occupied by healthy liver cells. There was nothing in the history of the case to show that the boy had ever been the subject of liver disease.

Dr. BRISTOWE also exhibited

A VARICOSE ULCER OF THE ŒSOPHAGUS,

from which fatal hæmorrhage had occurred. The patient was a married woman, 48 years of age. She had complained of slight dyspeptic symptoms for about two months before her admission into the Hospital. A little more than a fortnight after her admission, she had a sudden and very severe attack of hæmatemesis, and the next day she died. At the post-mortem examination the stomach was found to contain a large coagulum of blood, more or less altered, which occupied the whole length of the alimentary canal; but no disease could be detected in the mucous membrane of these organs. On removing and laying open the œsophagus, the veins under the mucous membrane were seen to be enlarged and tortuous, especially at the lower part, having all the characters of varicose veins in the lower extremities. About the middle of the œsophagus was a small imperfectly cicatrized ulcer, and about two inches above the cardiac orifice of the stomach was a recent opening, about as large as a No. 4 catheter, from which protruded a small fibrinous plug, and which yielded on pressure thin bloody serum. The ulcer opened into one of the varicose veins.

Dr. WILKS exhibited a specimen of

SYPHILITIC DISEASE OF THE LIVER.

This specimen appeared closely to correspond to such as have been described by some German pathologists as resulting from inveterate syphilis. The subject of it was a man, aged 39, who lately died in Guy's Hospital, under the care of Mr. Hilton. He had suffered three years from necrosis of the bones of the head, due to the effects of syphilis and mercury, and at last died in an extreme state of cachexia; the immediate cause of death being pleuro-pneumonia. Upon the surface of the right lobe of the liver was an indentation, like a cicatrix, and upon cutting this through, the tissue beneath was seen to be indented and contracted from the infiltration of a fibrous material into the parenchyma of the organ, and which, at the lowest part, took the form of distinct nodules. In the neighbourhood, were a number of such nodules, each about the size of a pea, of a pearly whiteness, and of considerable hardness, emitting no juice on pressure, but being composed of a lowly organized albuminous material, containing a few nuclei and fatty granules. They were found within Glisson's capsule, and everywhere were in close contact with the portal vessels. The testes were also destroyed by a fibrous degeneration. It has been thought that this disease of the liver is a variety of cirrhosis, but instead of the new material appearing in a diffuse form, it is deposited in a concrete form, or limited to isolated portions of the hepatic parenchyma. It has been long known that patients with syphilitic disease have suffered from derangements of the liver; and Mr. Hilton, in particular, has drawn attention to their frequency in this class of maladies, so that he predicted some disease of the liver in the present case. Dr. Wilks believed that there was some good reason for connecting the present affection with syphilis, although it required further corroboration; and he stated that in several cases of lardaceous disease occurring in syphilitic subjects, already published by him, there were fibrous cicatrices or knots on the surface of the liver, although only in one case did they present the marked characters of the present specimen. He also mentioned, in illustration of the effects of syphilis on the internal organs, that lately having to examine two children who were still-born of syphilitic mothers, he found peritonitis in both; in one the liver and diaphragm

were closely adherent, and the capsule already thickened; in the other pneumonia existed, as in the present case.

Dr. MURCHISON presented a specimen of

ABSCCESS OF THE RIGHT LOBE OF THE LIVER OPENING INTO THE COLON.

This preparation was obtained from the body of a man aged 40, who had always enjoyed good health, had been a temperate liver, and had never been abroad. After an exposure to cold he was suddenly seized with pain in the region of the liver, which became so severe, that on the second day he was obliged to go to bed. This pain continued without any intermission, and at the end of four weeks, when he was admitted into St. Mary's Hospital under Dr. Sibson, there was observed in the right side of the abdomen a painful, obscurely fluctuating swelling, continuous upwards with the liver, and extending as far downwards as the crest of the ilium, and forwards to within three inches of the linea alba. A week after admission into the Hospital diarrhoea set in, with puriform stools. This ceased after four days, by the end of which time the swelling had greatly diminished, the pain had disappeared, and there was great amendment in the general symptoms. The patient continued to improve for about a fortnight, when the diarrhoea suddenly returned, along with severe pain limited to a spot two inches below the margins of the ribs, in a line with the right nipple. This diarrhoea resisted all treatment, hectic fever set in, and the patient gradually sank, and died on the sixteenth day from the date of the relapse, or in the tenth week from the commencement of his illness. On post-mortem examination there were found extensive adhesions between the viscera on the right of the abdomen. The anterior margin of the liver was firmly adherent to the peritoneal surface of the abdominal wall; and its under surface to the transverse colon. In the right lobe of the liver was an abscess as large as a cocoa-nut, and extending to within a third of an inch of its upper surface. This abscess contained a large quantity of fluid feculent matter of a light yellow colour. The upper two-thirds of its walls were formed by the hepatic tissue, which exhibited a loose and shreddy aspect, without any limiting membrane. The lower third was completed by the kidney, the anterior layer of the fascia lumborum, and about three or four inches of the ascending and commencement of the transverse colon. This part of the bowel presented a cribriform appearance, and communicated freely with the cavity of the abscess. All that remained of that part of the wall of the gut which was opposed to the abscess, was a number of sloughy bands passing transversely across its axis, and between which the finger could be inserted readily into the bowel. There were extensive ulcerations throughout the whole of the ascending colon.

Dr. RUSSELL REYNOLDS exhibited a specimen of

MALFORMATION OF THE HEART IN A CYANOTIC CHILD.

This specimen was removed from the body of a girl who died at the age of 13 months. She had been cyanotic, and subject to convulsions since seven months of age; but prior to that period had presented no disease. During life its blue tint was intense. Auscultation of the heart evolved the existence of a systolic murmur, audible over the whole cardiac region, but having its maximum at the base, and extending in the direction of the left costal cartilage. The specimen exhibited presents the following abnormalities:—The foramen ovale is open, measuring six-eighths of an inch in circumference; the aorta arises from the right ventricle, measuring one inch and three-eighths in circumference; the left ventricle communicates with the right, by an orifice measuring seven-eighths of an inch in circumference; and, contrary to what usually pertains in cases of aortic origin from the right ventricle, the ductus arteriosus is closed, while its pulmonary artery, small in size, only five-eighths of an inch in circumference, arises from the right ventricle.

Mr. HUTCHINSON exhibited a specimen of

HYDATID IN THE ANTERIOR CHAMBER OF THE EYE OF A HORSE.

The eye had been forwarded to him by post in an unopened state, but without any note from the sender. (a) It was quite

(a) Should this meet the eye of the sender, Mr. Hutchinson will be much obliged by his forwarding some particulars of the case, especially as to the duration of the disease, etc.

fresh, and showed when opened a most interesting condition of disease. The cornea was thickened and opaque, the vitreous humour was yellow and of the consistence of syrup, running out when the sclerotic was divided. The retina was detached and hanging in folds; the lens was hard, and of a yellowish brown colour; the eye, in fact, although retaining its natural shape, was completely disorganised. The explanation of all this mischief seemed to be found in the presence of an hydatid cyst in the anterior chamber. This cyst, which in fact consisted of two separate and concentric ones, was of beautiful translucency and extreme thinness. It filled the anterior chamber and pushed back the iris, and had attachments to the adjacent structures around its circumference. Its contents were a clear fluid, and some small portions of solid material resembling isinglass. A careful microscopic examination had failed to detect either echinococci or their hooklets, or that concentric lamination of the cyst-wall which is characteristic of the echinococcus hydatid. Surrounding the outer hydatid cyst in every part was a tough membrane, thick and corrugated in parts, in others thin and flexible, consisting, as it seemed, of the inflamed and thickened "membrane of the aqueous humour." It accurately lined the whole of the anterior chamber, and was adherent at its circumferential angle of reflection to the ciliary ligament. Passing in front of the iris to the margin of the pupil, it dipped through that aperture and became connected with the front of the capsule of the lens. The posterior chamber was, from the retraction of the iris, etc., so nearly obliterated that it was impossible to say whether the membrane, here much corrugated, had really lined it. Mr. Hutchinson adverted to the improbability of such a membrane as that shown in the specimen having resulted from inflammatory changes, although, in a lost eye, such a mode of origin must of course be admitted as possible. He thought the specimen militated very strongly against the opinion held by Mr. Bowman and others, as to the non-existence of the membrane alluded to, and supported that of the older anatomists.

Mr. SPENCER WELLS said that the cysticercus was very common in the eye of the horse, and suggested that the specimen should be referred to a committee.

After some remarks it was referred to Mr. Haynes Walton, to be reported on to a future meeting.

Mr. OBRE showed a specimen of

ABSCCESS IN THE BRAIN.

It had been removed from a child who had been the subject of otorrhoea. The abscess was about the size of an egg, and occupied the part of the brain adjacent to the affected bone. The dura mater over the bone was ulcerated, but there was no actual caries of the osseous structure itself nor any roughening.

NORTH LONDON MEDICAL SOCIETY.

DECEMBER 14.

Mr. PART, President, in the chair.

Mr. NORMAN read a paper

ON STRABISMUS, AND ITS CURE BY SURGICAL OPERATION.

Having given a short sketch of the history of squint operations, as suggested by Stromeyer, of the zeal with which the practice was taken up in this country on its first introduction, of the great expectations that were formed of it on one hand, and the failures which were predicted on the other, and of which many undoubtedly happened, it was contended that these were not such as to deter judicious Surgeons from operating, but only to direct attention to their causes, and their removal or avoidance. At first nothing was known of the pathology of the affection, and not much had been added by actual demonstration of the state of the muscles since. The operation rested upon a certain amount of analogy between strabismus and club-foot. Strabismus, however, was always or almost always a post-partem occurrence, and a consequence of disease. Club-foot was produced *in utero*, and was a result of impeded development of the foetus. In strabismus, the individual actions of the muscles were perfect, the associated actions only were not. In club-foot the regular and perfect position and movement of parts could not be affected under any circumstances by the muscles. In most cases of strabismus there was no paralysis, nevertheless it was necessary before

undertaking to operate to be assured upon this, as also that the affection was permanent, not maintained by existing disease of the head or other parts, nor a natural remedy for an opacity of the cornea. The specific objections that had been brought against operations were:—1. That they failed altogether. 2. That they sometimes made matters worse, causing too great prominence with eversion in internal, and inversion in outward squints. 3. Inflammation and suppuration of the wound. 4. The formation of sprouting granulations or excrescences. 5. Inflammation and suppuration of the globe. Failure to effect a change was due to want of discrimination between cases fit for operation and not so, and not perfectly dividing the faulty muscle. The new displacements resulted from dividing more than the muscle, and other like causes generally avoidable. The inflammatory sequelæ might be almost always escaped by avoiding rude and unnecessary proceedings in operating. Subconjunctival division of the muscle would probably never be attended by any of these consequences, except the first, viz., imperfect division of the muscle, and failure. Many efforts had been made to bring operative procedures to perfection in these cases: it was an important point gained when it became clearly known that no good was to be got by dividing the oblique, and other muscles and parts really not concerned in the case. Subconjunctival operations from M. Guérin's first suggestion had not met with much favour; they were performed with a knife, and it had hitherto been difficult to adopt the kind of instrument to the work. The desideratum, it was hoped, was about to be supplied by Mr. Holthouse, who had bestowed much pains on the subject.

OBITUARY.

JOHN AYRTON PARIS,

M.D. Cantab., D.C.L. Oxon., F.R.S., President of the Royal College of Physicians.

John Ayrton Paris, M.D., was born at Cambridge on the 7th of August, 1785, and was baptized at St. Benedict's in that town on the 7th of September following. He was the son of Thomas Paris of Cambridge, gent., by his wife Elizabeth Clay, the eldest daughter of Edward Ayrton, of Trinity College, doctor of music. Of the former we can recover no particulars; the latter, who is represented as a woman of strong and cultivated mind, survived to witness her son's eminence, and died at Chester, on the 8th of January, 1847, aged 84.

At an early age Dr. Paris was placed under Mr. Barker, of Trinity Hall, Cambridge, whence he proceeded to the Grammar School of Linton. Subsequently he was placed for private instruction with Dr. Bradley, physician to the Westminster Hospital, a good classical scholar. With him he read the Greek and Latin medical authors, and acquired a considerable knowledge of botany.

He was matriculated at Cambridge as a pensioner of Caius College, on the 17th of December, 1803; was elected to a Tancred Studentship in Physic on the 3d of January, 1804, and in this capacity made the Tancred speech on the 28th of October, 1808. From the commencement of his career at Cambridge he evinced a strong predilection for natural science; was a diligent student of chemistry under Professor Farish; and of mineralogy under Dr. Clarke; obtained the notice of these two teachers, and the friendship and countenance of Mr. Smithson Tennant. From Cambridge he proceeded to Edinburgh, then at the zenith of its reputation as a school of practical medicine, and became the friend and intimate companion of some of the most distinguished men who then adorned the Northern capital. His sojourn in Edinburgh was for improvement in the practical part of physic, but his love for science was still predominant, and he became one of the most active members of the Apparatus, or Philosophical Committee of the Royal Medical Society.

Dr. Paris took his degree of Bachelor of Medicine at Cambridge, July 2, 1808; a licence *ad practicandum* from the University immediately afterwards; and then proceeded to London. Here he had the good fortune to attract the notice of Dr. Maton, who, struck by the extent and accuracy of his chemical knowledge and the versatility of his genius, held out to him the hand of friendship, warmly espoused his interests, and constituted himself, in the highest sense of the term,

his patron. In the early part of 1809 Dr. Maton resigned his office of Physician to the Westminster Hospital, and owing, probably, to that gentleman's recommendation, Dr. Paris, by a resolution of the House Committee, was requested to undertake the duties until a successor could be appointed. Shortly after this he was attacked with fever, and was unable to attend on the day fixed for the reception of candidates. His credentials were, however, presented by his relative, Mr. William Ayrton, and on April 14, 1809, being then but 23 years of age, he was elected Physician to the Hospital by an overwhelming majority over his competitor, Dr. Donald Mackinnon. Dr. Paris entered on the duties of his office with ardour, and soon afterwards commenced a course of lectures on Pharmaceutical Chemistry. In 1810 he married Mary Catherine Noble, eldest daughter of Francis Noble, Esq., of Fordham Abbey, Cambridgeshire.

By his lectures and writings (for he had published a Memoir "On the Physiology of the Egg," 8vo., London, 1810; "A Syllabus of a Course of Lectures on Pharmaceutical Chemistry," 8vo., London, 1811; and "Pharmacologia, or, the History of Medical Substances," 12mo. London, 1812), Dr. Paris had already attained a name among his contemporaries, and was regarded as one of the most rising members of his Profession, when a circumstance occurred which exerted an important influence on his future career. The death, in 1813, of Dr. John Bingham Borlase, the early instructor of Sir Humphry Davy, and for many years the leading Physician at Penzance, left a vacancy in that part of Cornwall, which many of the resident families were anxious to have efficiently supplied. Some influential gentlemen applied to Dr. Maton to recommend them a Physician. He named Dr. Paris, who, after some hesitation, was induced, for a time, to forego his prospects in London, and remove thither. Previously thereto he returned to Cambridge, was created Doctor of Medicine, July 6, 1813 (a), resigned his office at the Westminster Hospital, and having, on the 30th of September, 1813, been admitted a candidate of the Royal College of Physicians, he proceeded to Penzance, carrying with him letters of introduction and recommendation to the first families in Cornwall, most of which had been procured for him by Dr. Maton.

Dr. Paris's progress in Cornwall was rapid, beyond his expectations. His first year's receipts more than doubled the largest amount which Dr. Borlase had ever obtained, and his progress onwards was uninterrupted. He was admitted on terms of intimacy and friendship by the best families in the county. He co-operated with them in every effort for the advancement of science, and he urged them to exertions which, without him, would never have been made. At Cambridge, Dr. Paris had applied himself with enthusiasm to mineralogy, and when settled in Cornwall, a county beyond all others favourable to the study of that and the allied science of Geology, he devoted his leisure hours to these attractive subjects. Lamenting that such vast opportunities for original research as were there presented should be neglected, and anxious to systematize efforts, and foster them to maturity, he proposed, and with the co-operation of scientific friends established (Feb. 11, 1814) the Royal Geological Society of Cornwall. The limited space at our command precludes any lengthened notice of this Society. It will suffice to state, that it has been long established on a firm and lasting basis, that it ranks among the leading scientific associations of the age, and has issued several volumes of Transactions, containing essays of the utmost value and interest. Agriculture, too, attracted some portion of Dr. Paris's attention, and he communicated to the Penwith Agricultural Society a valuable paper "On the Soils of Cornwall, with a view to form a rational System of Improvement by the judicious Application of Mineral Manure." This was printed at the request of the Society, and published at Penzance in 1815. About the same time he issued anonymously an interesting little work, "A Guide to the Mount's Bay and the Land's End." The first edition was soon exhausted, and a second, much enlarged and improved, appeared some time after its author had quitted Cornwall. It was during Dr. Paris's residence at Penzance that he gave to the miners the inestimable boon of the "tamping bar," an instrument by which they are enabled to pursue their business without the danger of striking fire and prema-

(a) Dr. Paris was admitted M.D. July 8th, 1812, the earliest day possible, viz., the day after Commencement Tuesday, but he could not be created Doctor till Commencement Tuesday, 1813, viz., July 6th. He is technically called a Doctor of the year 1813.

turely exploding the gunpowder with which they blast the rock. "By this simple, but admirable invention," says a writer in the *Times*, "Dr. Paris, no doubt, saved more lives than many heroes have destroyed."

Dr. Paris had never intended to make a lengthened stay in Cornwall, and he took leave of the county in 1817, in a "Memoir of the Life and Scientific Labours of the late Rev. Wm. Gregor, A.M.," an attached personal friend, who had distinguished himself by the discovery of Manacchanite, or, as it has since been termed, Gregorite. This elegant biographical sketch was read before the Geological Society of Cornwall at the anniversary meeting of 1817, and was published by request. In it he announces his approaching departure, and takes an affectionate farewell of the Society he had himself founded. His brief sojourn in the county probably exerted no unimportant influence on his subsequent career in London. He had, as we have seen, made friends among the aristocracy and gentry of Cornwall, and their influence was now exerted to advance his interests in the metropolis.

On his return to London in 1817, Dr. Paris took up his abode in Sackville-street, but in the following year removed to Dover-street, Piccadilly. At this period he began a course of lectures on *Materia Medica*, in Windmill-street, which were continued for several successive years, and contributed greatly to his reputation. To a perfect knowledge of chemistry and botany, sound common sense, and a keen perception of the fallacies with which his subject had, in the lapse of ages, been encumbered, he added the charms of elegant language, abundant classical illustration, and a fund of anecdote which could not fail to rouse and rivet the attention of his pupils. He soon became one of the most popular lecturers on *Materia Medica* in London, and attracted a considerable class, among which were many of the most distinguished physicians of the present day.

The College of Physicians (of which he had been admitted a Fellow September 30, 1814,) had about this time become possessed of one of the most complete collections of *Materia Medica* in Europe. That collected by Dr. Burges, and presented to the College after his death by Mr. E. A. Brande, to whom it was bequeathed, had recently been collated with the cabinet of Dr. Coombe, purchased for that purpose; and the College, anxious to make it available for instruction and improvement, instituted (out of their own funds) an annual course of lectures on *Materia Medica*. The scientific attainments of Dr. Paris, and the reputation he had already attained as a lecturer, pointed him out as the proper occupant of the new chair. In June, 1819, he entered on the duties of the office by the delivery of a short series of lectures on the "Philosophy of the *Materia Medica*." The substance of these elegant discourses was introduced into the third edition of the "Pharmacologia." Their publication constitutes an epoch in the history of the science and art of officinal and extemporaneous prescription. Dr. Paris retained his office of Lecturer on *Materia Medica* at the College until 1826, in which year he took for his subject the recent additions to the *Materia Medica*, with all the new discoveries in Chemistry which had reference to that subject. The attendance on these, the first lectures delivered at the New College in Pall Mall East, was so numerous, that numbers went away unable to obtain even standing room in the theatre.

Of Dr. Paris's subsequent career but little need be said. From this period his fame and his practice steadily increased, and although he never attained to the extensive professional engagements of a Baillie, a Halford or a Chambers, he enjoyed for more than a quarter of a century a very select and highly respectable practice. "To Dr. Paris," writes one who evidently knew him well, "the office of physician was no hireling's work, to be hurried through for the purpose of accumulating a fortune, or earning distinction. It was the business and glory of his life."

By his colleagues in the College of Physicians he was held in the highest respect. He served the office of Censor in 1817, 28-36-43—that of Consiliarius in 1836-42; was named an Elect on the 25th of June, 1839, and delivered the Harveian Oration in 1843. On the 20th of March, 1844, (on the vacancy occasioned by the decease of Sir Henry Halford,) he was elected President of the College, an office to which he was annually re-elected, and which he continued to fill to the time of his death. For twelve years he occupied this distinguished position. Superior to his predecessor in scientific knowledge, he

was inferior to him in classical attainments. The one was an accomplished philosopher—the other an elegant scholar. Dr. Paris was educated at Cambridge, Sir Henry Halford at Oxford. Both were brilliant examples of the peculiar discipline and tendencies of their respective universities at that period; and both were calculated, though in different ways, to shed lustre on the learned body over which they so long and so ably presided.

We now approach the close of Dr. Paris's career. He had long suffered from disease of the urinary organs, and although subject to frequent attacks of agonising pain, he preserved so calm an exterior that few suspected the existence, none the degree of the malady which was bringing him to the grave. The death of Mrs. Paris, to whom he was tenderly devoted, added mental anguish to bodily sufferings. She died June 24, 1855, of a disease which his skill could not cure, and which it could not always alleviate. His distress was that deep feeling of the heart which disdains the weakness of complaint. The feeling itself might have been too acute to admit of this alleviation, for trifling afflictions are alone querulous, or his philosophy might have checked the rising sigh. From this bereavement, however, he never thoroughly recovered. For several months before his death indications of failing bodily powers might be perceived. He became perceptibly thinner, and was exhausted by efforts which a short time previously had been borne with impunity. His mental powers remained, however, as vigorous as ever. "The last ten days of Dr. Paris's life were spent in the midst of excruciating sufferings, which were borne with the most remarkable fortitude. His chief concern appeared to be to console and comfort those around him, who could ill disguise their grief at the impending and irreparable loss. His intellect remained to the last as clear as at any time of his life, and while power of speech remained nobody who listened to him could believe that the end was so near at hand." He died at his house in Dover-street, on the morning of the 24th of December, 1856, in the 72nd year of his age, and was buried by the side of his wife at Woking.

Dr. Paris was a Fellow of the Royal Society, Honorary Doctor of Civil Law, of Oxford, and Honorary Member of the Board of Agriculture; and in virtue of his position as President of the College of Physicians, was President of the National Vaccine Establishment, a member of the Medical Council of the Board of Health, and a Trustee of the British Museum.

It yet remains to give some account of the numerous works we owe to Dr. Paris's pen. But this, with a short sketch of his character as a physician and a philosopher, we must postpone for another week.

W. M.

(To be continued.)

THE LATE DR. ROSS OF MADEIRA.

Dr. Archibald Ross, who recently fell a victim to cholera at Madeira, was born on the 15th July, 1809, at the Manse of Crawford, Lanarkshire, of which parish his father, the late Rev. John Ross, A.M. was then minister. Having at an early age shown a decided predilection for the study of medicine, he was, while scarcely fifteen years of age, bound as an apprentice to the Messrs. Crichton of Stockbridge, a suburb of Edinburgh; both of them men of great moral worth, and in the enjoyment of extensive practice. Dr. Ross seems at once to have availed himself of the advantages and example held out to him by his excellent masters, for we find that while yet an apprentice, he was the successful competitor, among twenty-five candidates, for the office of House Surgeon to the Edinburgh and Leith Humane Society.

In 1829, Dr. Ross obtained his diploma from the Royal College of Surgeons of Edinburgh, and it was shortly after this that his health began to give way. It became evident that the laborious duties of a Dispensary, and attendance at the University, with the necessary amount of study to keep pace with the lectures of the professors, had already proved too heavy a strain upon his constitution. He therefore gave up the Dispensary appointment, although very reluctantly, as it afforded him full scope for the exercise of his innate love for the poor, and sympathy with the suffering.

By the advice of Professor Alison and other friends in Edinburgh, Dr. Ross resolved to proceed to Madeira for the benefit of his health. He accordingly sailed for that island in

the latter part of 1830. A sojourn of a few months in that mild and beautiful climate had the effect of completely restoring him to health, and seeing a fair prospect of success in private practice, he decided on making it the place of his future residence. Dr. Ross had been between three and four years in Madeira, his practice steadily increasing, when a convict ship from England, bound to New South Wales, arrived at the anchorage, the surgeon in charge having some days previously committed suicide.

The captain of the ship represented his case to Her Majesty's Consul, and stated that in the event of his not procuring a surgeon, he should be obliged to return to England with his unfortunate cargo of exiles. The case was urgent, the Consul appealed to Dr. Ross, who on this, as on all other occasions of his life, acted upon the principle of duty, rather than of personal interest, and at once volunteered to leave his practice, and undertake the novel and responsible duty of Medical Officer of the convict ship. His journal of the voyage, of his treatment of the prisoners, of the school which he established on board, of the proofs of the confidence of all under his charge, and of his residence in Sydney and Hobart Town, are full of interest and information. On the homeward voyage from Australia, his vessel called at St. Helena. This was just before the island was transferred from the East India Company to the Crown; and as one of the Medical Officers of the Company was about to proceed to Europe on furlough, Dr. Ross was requested to supply his place on the island. The duties of the office were performed to the entire satisfaction of the authorities; and Dr. Ross, as was his wont, also devoted a portion of his time to the medical wants of the poor on the island, in recognition of which humane duty, the Governor, General Dallas, presented him with a valuable piece of plate.

Returning to England in 1836, Dr. Ross married the daughter of Joseph Carne, Esq., of Penzance, and soon after his marriage he again went out to Madeira. There he remained until 1848, in the enjoyment of good practice, and the estimation of all on the island, when, by the advice of his friends, and many of his English patients at Madeira, he was induced to come to England, with the view of establishing himself as a Physician in London. It was thought that among the great numbers of persons proceeding from this country to Madeira for chest complaints, many were likely to avail themselves of the opinion of a Physician whose long residence there had rendered him perfectly acquainted with its climate, and with those cases most likely to be benefitted by it.

One year in London, however, convinced him, that our rigorous winter climate was too severe for his own health, as well as for that of some others of his family, which determined him to make Madeira his final place of abode.

It was in the month of July last that cholera first appeared at Madeira. Dr. Ross had left the island to enjoy a short holiday in England, only a few weeks previously; and he had seen but few of his friends when the startling news reached this country. Consistently with all the former actions of his life, his mind was at once made up. He could see for himself on an occasion like this only one proper course, and that was the straight path of duty. He speedily made his arrangements to return to the country of his adoption; and, having become a member of "The Committee for the Relief of the Sufferers from Cholera at Madeira," then in course of formation, in less than a week he was in the steam-packet, far on his way to the distressed island. On the morning of the 30th of August he landed at Funchal, and on the following morning he thus wrote to his friend Dr. M'William, in London:—"I am happy to inform you that I arrived in Funchal Bay at four o'clock yesterday morning. We had a most auspicious voyage, having had a smooth sea all the way; I landed early in the morning, and went immediately to wait upon the Governor (a), who received me with open arms, and thanked me most cordially for having so promptly returned to the succour of the poor people. I am thankful to tell you, that cholera is rapidly on the decline. On Friday, the 29th inst., there were only 7 deaths in Funchal, whereas, on the 30th of July there were 200 dead bodies in the General Hospital. I have been welcomed in the most gratifying manner by high and low hailing me, and many of them embracing me in the public streets. I went about the town in all directions, visit-

ing and prescribing for the sick. I left for my cottage up here (Camacha, 2700 feet above the sea level,) at 5 p.m. I saw several patients on the road, and was of use to them; and all the way over the hills I was cheered in the most enthusiastic manner by crowds of people. Thank God, I found my dear wife and children in blooming health. The Governor—good, energetic, warm-hearted man that he is—shed tears when I told him of the good things that were coming out for the poor in the "Hecate."

The concluding portion of Dr. Ross's life is thus feelingly described by his friend, Mr. Bayman, a gentleman who, with the Governor, the British Consul, Mr. Stoddart, Mr. Phelps, Major Peacocke, Mr. Bewick, and others, formed a Relief Committee on the island, and did good service during the whole of the epidemic.

"In the evening," says Mr. Bayman, "he joined his family at Camacha, a village about seven miles from Funchal, or one hour and half's ride. With them he spent the Sunday. On Monday he returned to Funchal, and was engaged all day till seven in the evening, attending the poor sick people, without being able to take any food. Tuesday and Wednesday were spent much in the same way, with the addition of arrangements for opening a small Hospital for the poor close to his own house. This Hospital was to be under his immediate superintendence.

"On Wednesday evening, Dr. Ross went again to Camacha, returning to town on Friday morning. Until the afternoon of this day, he was occupied among the sick, and in making preparations to open his Hospital on the morrow. At four o'clock he paid five pounds at the British Consulate to enable a countrywoman to leave the island, in the brig "Comet," bound to London. This was his last (visible) act of charity. At five he went to his town-house, and shortly afterwards to bed. During the day he had complained of pain in the stomach, accompanied with slight diarrhoea. About seven, an Apothecary, who was to assist the Doctor in the management of the Hospital, visited him, and remained with him till ten; at midnight he came again. Dr. Juvenal was called in about half-past one, a.m. I arrived about an hour afterwards, and, at the request of Dr. Ross himself, sent for his wife. The disease went on, and terminated fatally in the afternoon."

Such is an imperfect sketch of the life of Dr. Ross—a life which, although suddenly and prematurely terminated, bore ample evidence of a mind imbued with feelings that do honour to our common nature, and which took for its guide the great principle of Christian duty.

To Mr. Bayman, he said, the day after his return to Madeira from England, "Should it please God to take my life in this service, I trust my wife and family will bow with submission, and feel that my duty called me. A Doctor has no choice in such cases."

These are fine sentiments; and they are the more beautiful and affecting as coming from one who was so soon to stamp their sincerity by the seal of his own fate.

DR. URE.

Dr. Andrew Ure was born in Glasgow in the year 1778, and graduated in the University of that city in 1801, becoming a Member of the Faculty of Physicians and Surgeons in 1803. He held for some time the post of Professor of Chemistry in the Andersonian University, where for many years he also delivered a systematic course of lectures on *Materia Medica*. In 1818, he published an interesting memoir, entitled "New Experimental Researches on some of the leading doctrines of Caloric, particularly on the relation between the elasticity, temperature, and latent heat of different Vapours, and on thermometric admeasurement and capacity." In the same year he also published the details of some experiments on nitric acid, on a new explosive eudiometer, and on the relation between muriatic acid and chlorine. In 1819 he published an account of some galvanic experiments, made on the body of a recently-executed criminal; and another memoir on the constitution of muriatic acid of different gravities. In 1821 appeared the first edition of his well-known "Dictionary of Chemistry," which has gone through several editions, and is still a standard work upon that science. In 1822 he published a paper "On the Ultimate Analysis of Vegetable Substances," which was one of the earliest contributions to the now extensive department of Organic

(a) Brigadier-General Conceiro, who, throughout the whole course of the epidemic, employed the whole resources of his official position, and of his benevolent heart, in devising relief to the suffering.

Chemistry. In 1824 he published a translation of Berthollet's work on Dyeing and Bleaching. In the year 1829 appeared his System of Geology. In May, 1830, he came to London, and was employed by the Lords of the Committee of Privy Council to institute a series of experiments on Sugar Refining; and he subsequently, in the same year, became Chemist to the Board of Customs. In 1835 he published his "Philosophy of Manufactures," and in the following year his work on the "Cotton Manufactures of Great Britain." His large and laborious work, entitled, the "Dictionary of Arts, Manufactures, and Mines," appeared in 1837, and the last edition appeared in 1852. He was elected a F.R.S. in 1822, was a Fellow of the Geological Society from its foundation, and was a Fellow of the Astronomical Society for many years.

A few years ago Dr. Ure experienced an attack of apoplexy, followed by paralysis, from which he in a great measure recovered; but for some time past it has been evident to his friends and relatives that his powers of body were gradually decaying under the influence of advancing years, although he was not seriously indisposed until within a short period of his decease, which occurred somewhat unexpectedly on the morning of the 2nd inst.

Dr. Ure was one of the best chemists of the present day; he had watched the dawn of chemical science at the conclusion of the last century, and contributed materially to its advancement by his lectures, researches, experiments, and published works. He was an able and fluent lecturer, a clear and concise writer, and a careful analyst. He cannot properly be classed with those philosophers whose original genius has placed them in advance of their age, or whose discoveries have startled the world by their importance to mankind; but Dr. Ure must always be remembered with respect as one of the most zealous cultivators of natural science in a century distinguished by the labours of such men as Davy, Faraday, Wollaston, Henry, Turner, whose labours have not been confined to the library or the laboratory, but who have connected the mysteries of science with the progress of the arts, and have introduced the symbolic expressions of Chemistry and Natural Philosophy into the language of common life.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, January 1, 1857 :—

CRESY, THEODORE GRANT, H.M.S. "Dreadnought."
GOODALL, WILLIAM PRESTON, Market Drayton, Salop.
KNOTT, ROBERT CHARLES, New Zealand.
SKIPPER, JOHN, Dalston.

DEATHS.

ADCOCK.—Dec. 27, aged 58, John Fleming Adcock, Esq., Surgeon, of Little Walsingham. M.R.C.S.E. 1843; L.S.A. 1820.

ALEXANDER.—We regret to have to announce the death of Gervase Alexander, Esq., M.D., which took place at his residence, Grove House, on Wednesday last. This venerable and respected gentleman was one of the few survivors of a generation which has long since departed, and few men lived to see greater changes than those which he witnessed in his native town. He was in his 84th year, and his cheerful presence will be missed by many for whom he had ever a kind word and a courteous greeting. He was interred on Wednesday, when the whole of the members of the medical profession resident in the town accompanied his remains to their final resting-place. M.D. Aberdeen, 1817; Member of the Halifax Literary Philosophical Society; author of a "Translation of the Odes of Horace."

BOYD.—Dec. 31, at Nice, Italy, John McD. Boyd, M.D., aged 23 years, third son of Mr. William Boyd.

CROASDAILE.—December 31, at Boulogne-sur-Mer, Edward Croasdaile, M.D., in his 77th year.

HENDERSON.—Jan. 3d, at 8, Devonshire-street, Portland-place, aged 23, Thomas Henderson, Esq., late a student at St. George's Hospital, of scarlet fever, contracted while performing, pro tempore, the duties of house-surgeon to the hospital for sick children.

DRIVER.—January 1, at Sanehichall-street, Glasgow, Thomas Driver, Esq., M.D., H.E.I. Co's. Service.

URE.—January 2, at 18, Upper Seymour-street, Portman-square, Andrew Ure, Esq., M.D., F.R.S., F.R.C.S.E. (Hon.) 1843; Surgeon and Lecturer on Clinical Surgery at St. Mary's Hospital; Consulting Surgeon to the Westminster General Dispensary. Author of the "Compendium of the Materia Medica;" "On the Nature and Treatment of Cancer," etc. (See Memoir.)

WIBLIN.—December 31, at Alfred-street, Bedford-square, William Wiblin, Esq., late Surgeon, of Strood, Kent, (brother of John Wiblin, Esq., F.R.C.S.,) in his 41st year. M.R.C.S.E. 1842; L.S.A. 1843.

ST. GEORGE'S HOSPITAL.—Dr. Wilson has resigned his appointment as Physician to this Hospital. Dr. Pitman, the Senior Assistant-Physician, becomes Physician, and it is expected that Dr. Barclay will obtain the vacant office of Assistant-Physician without opposition. Dr. Barclay is so well and so favourably known to the Profession, and has worked so hard and for so many years at this Hospital, that his appointment will be a subject of general congratulation.

EXPECTED OPERATIONS.—On Saturday next, at King's College, Mr. Fergusson will perform lithotomy, and also excise some melanotic tumours from the groin.

A LARGE FEE.—From a paper published in Paris as to the expenses of the Emperor last year, it appears that M. Paul Dubois, who attended the Empress, received a fee of £2,760.

ODONTOLOGICAL SOCIETY OF LONDON.—The first meeting of this Society was held on Monday evening last, when a large number of the leading Metropolitan and Provincial Practitioners of Dental Surgery met together. Some preliminary business having been gone through, the President, Mr. Cartwright, delivered an able and eloquent address, in which, after glancing at the progress of Dental Surgery during the last century, he took a review of the present position and prospects of the Profession, and strongly urged the necessity of a liberal education in conjunction with the special qualification required for those who would practise this department of Surgery with credit and success. The advisability of maintaining the connexion of Dental with general surgery was strongly insisted upon, and it was held that a *voluntary* separation from the College of Surgeons could not but be disadvantageous to the body of Dentists. The great need of a Society formed on the model of other scientific societies, as a point of union amongst the practitioners of Dental Surgery and as a medium for the communication of experience and the discussion of professional subjects, was pointed out, and the President concluded by expressing his conviction that these objects would be fully attained by the establishment of the Odontological Society. He then urged upon the members the necessity of cordial co-operation in furthering the purposes of the Society by the contribution of papers of interest, and by attendance at the meetings. Several interesting preparations illustrative of Dental Pathology were exhibited, and there was a good display of instruments and appliances interesting to the Profession. After the meeting the gentlemen present and many friends of the Society partook of an elegant supper at the house of Mr. Saunders, the Treasurer. The great unanimity which characterized the proceedings of the evening gave earnest of the vigour with which the objects of the Society will be carried out.

MORTALITY NOTABILIA.—The total number of deaths registered in the week that ended on Saturday is 1497 persons. In the first week of the year, during the period 1847-56, the average number of deaths was 1321; and if this is raised in proportion to increase of population, for comparison with the number in the present return, it becomes 1453.

BIRTHS.—Last week the births of 1025 boys and 948 girls, in all 1973 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1598.

METEOROLOGY.—The mean daily reading was above 30 in. on Tuesday and Wednesday. The highest reading was 30.13 in. on Wednesday, and the lowest 28.97 in. on Saturday. The mean temperature of the week was 40.6°, which is 3.7° above the average of the same week in 43 years. The mean temperature was 11.3° below the average on Sunday, and was as much above it on Thursday.

THE following are the number of Deaths from Small-pox, Measles, Scarlatina, Hooping-cough, Diarrhoea, and Typhus, in the several Districts of London, for the past Week :—

	Popula- tion.	Small- pox.	Measles.	Scar- latina	Hoop- ing- Cough.	Dia- rrhoea.	Ty- phus.
West.....	376,427	2	7	1	6	3	7
North	490,396	1	16	5	5	5	7
Central ..	393,256	1	5	5	9	2	8
East.....	485,522	..	5	7	14	2	7
South	616,635	1	5	11	17	4	8
Total..	2,362,236	5	38	29	51	16	37

DEATHS REGISTERED in the Metropolis for the Week ending Saturday, January 3, 1857.

CAUSES OF DEATH.	In the Week ending Saturday, Jan. 3, 1857.						Averages of Temperature and Deaths in 10 Weeks.
	Deaths of Persons.						
	AT ALL AGES.	Under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.	At 80 Years of Age and Upwards.	
Mean Temperature	40° 6						38° 4
ALL CAUSES	1497	676	198	272	273	50	1320·7
SPECIFIED CAUSES	1467	674	198	272	273	50	1315·8
DISEASES:—							
1. Zymotic Class	224	179	16	15	14	..	267·3
2. Dropsy, Cancer, and others of uncertain seat	60	11	5	20	21	3	54·7
3. Tubercular Class	231	93	81	49	8	..	188 0
4. Of Brain, Nerves, etc. ..	132	58	11	30	32	1	146 7
5. Of Heart, etc.	59	8	10	25	15	1	53·6
6. Of Respiratory Organs ..	317	131	17	58	92	19	281·4
7. Of Digestive Organs ..	70	27	7	22	14	..	68·0
8. Of Kidneys, etc.	14	1	1	5	6	1	12·7
9. Of Uterus; viz.—Puer- peral Disease, etc.	12	..	7	3	2	..	8·9
10. Of Joints, Bones; viz.— Rheumatism, etc.	10	5	1	2	1	1	10·8
11. Of Skin, etc.	5	3	..	1	1	..	2·8
12. Malformations	4	4	..	..	..	..	3·2
13. Debility from Premature Birth, etc.	39	39	..	..	..	..	34·5
14. Atrophy	44	32	1	2	9	..	27·4
15. Age	59	..	..	..	38	21	62·8
16. Sudden	45	24	8	6	5	2	20·6
17. Violence, Privation, etc. .	142	59	33	34	15	1	72·9
CAUSES NOT SPECIFIED..	30	2	..	..	..	..	4·4

TO CORRESPONDENTS.

The important practical communications of Professor Simpson, of Edinburgh, on a New Canstic, and of Mr. Wilde, of Dublin, on Leucorrhœal Ophthalmia, are in type, and will appear in our next Number.

J. W. W.—The advertisements will not be admitted for the future. The object was not so apparent as in the advertisements of the De Roos fraternity, and it was not thought that harm could be done by making the Medical Profession acquainted with the exhibition; but agreeing with our Correspondent in the main, orders have been given to refuse any further insertion.

A Young Surgeon.—It is extremely difficult to say what are considered "moderate charges for various surgical operations." They vary so much with the circumstances of the patient and the practice of the neighbourhood, but as a general rule they are very much too low, and might easily be raised by common agreement among the practitioners of any town or district.

An Ignorant Fellow.—We do not feel at liberty to alter expressions used by lecturers or contributors of original communications, and it would have been decidedly wrong to alter an expression in a quotation from Wiseman.

A Subscriber wishes to be informed of some Institution where a female illegitimate child may be taken care of, and eventually put out in the world, for £100 or £120.

Mr. Hardwick's interesting cases shall appear as soon as possible. The delay, which we regret, has been unavoidable.

Mr. Holderness.—We do not think the relief described after the removal of constipation to be at all unusual.

Paterfamilias.—It is by no means absolutely necessary that a youth should have indentures of apprenticeship, in order to present himself for examination. If he have served after the manner of an apprentice, that is to say, if he have been acquiring Medical knowledge under competent supervision, the letter and the spirit of the act are both preserved. But the gentleman who gives the testimonial must be himself a Licentiate, or legally entitled to practise as such.

Dr. Couch.—Many thanks.

J. H.—Our remarks did not apply to Surgeons in practice before 1815.

MR. W. E. POPE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In a Dublin newspaper I find an advertisement of a cure of "Deafness, and also Deafness and Noises in the Head, by Mr. William Evans Pope, M.R.C.S., Surgeon to the Eye and Ear Institution, 1, Warwick-street, Charing-cross, London. Self-enre for country patients, free for seven stamps." Can you, either by letter or in the *Medical Times and Gazette*, tell us who this is? I am, &c. AN IRISHMAN.

Pharmacien.—The sweet and the bitter almond are only varieties of the species *Amygdalus communis*. The oil of sweet almonds is obtained from both indifferently by expression; but the oil of bitter almonds is obtained by the action of water upon the cake of the bitter almond, after the sweet oil has been withdrawn.

M.R.C.S., L.M., L.A.C.—The single qualification is sufficient.

A Hospital Surgeon.—There is a rule in St. Bartholomew's Hospital that the Medical Officers shall not retain their post after sixty-five years of age, but this rule does not apply to the present senior Medical Officers of that charity, as they were elected before the law came into operation.

Mr. James Brown.—The College of Surgeons of England does not require attendance upon botanical lectures. The University of London not only requires some acquaintance with botany on the part of its candidates, but it makes botany an essential part of its examinations.

Dr. Wm. Jones, Holyhead.—It will not be necessary for either A, B or C to pass the preliminary examination, in case the present Medical Reform Bill should become law. The new measure does not make a preliminary examination compulsory, but merely requires evidence on the part of Medical candidates that they have received a good preliminary education. What testimonials will be considered sufficient upon this point has not yet been determined.

COMMUNICATIONS have been received from—
Professor SIMPSON, Edinburgh; Mr. WILDE, Dublin; Dr. M'DONNELL; Dr. MUNK; Mr. HAVILAND; Mr. SPACKMAN; Editor of *Renfrewshire Reformer*; Dr. M'WILLIAM; Mr. HARDWICK; Mr. GRIFFIN; Mr. COUSINS; Mr. GAY; Mr. WILLIAMS; Mr. PRICE; Mr. ROBERTS; Dr. BARNES; Dr. DEIGHTON; Mr. BARTLET; Dr. C. SMITH; Mr. HEWSON; Mr. GOODWIN; Mr. LITTLE; Dr. BURTON; Mr. HOLBERTON; Mr. BATT; Mr. DAYMAN; Dr. BABINGTON; Dr. MUNRO; Mr. BURMAN; Mr. STARLING; Mr. PIPER; Mr. ALLNUTT; Dr. W. JONES; Mr. NORMAN; Mr. BALLANTINE; Dr. ALEXANDER; Dr. M'LEOD; Mr. HORDLEY; Dr. THOMSON; E. F.; Mr. D. SPARKS; Mr. P. DOWNEY; Mr. SAVORY; Mr. HOLMES; Dr. ELLIOTSON; Mr. GILLESPIE, Durham; Mr. CHIPPENDALE; Mr. F. C. SKEY; Mr. GRANTON; Mr. J. PHILLIPS; Mr. BRENCHELY; Dr. MACKESY; Mr. WATT; Mr. C. WILLIAMS; Mr. ROBINSON; ALPHA; Mr. R. WRIGHT; Mr. HOWSON; Mr. HASLEHURST; Dr. WALLER; Mr. HEWISON; Mr. FULCHER; Mr. NEWNHAM; Mr. BARRETT.

APPOINTMENTS FOR THE WEEK.

JANUARY 10. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; Westminster, 1 p.m.; King's, 2 p.m.; Charing Cross, 1 p.m.
MEDICAL SOCIETY OF LONDON, 8 p.m.: Dr. Snow "On the Vapour of Amylene."

12. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.; Orthopædic Hospital, 3 p.m.

13. *Tuesday.*

Operations at Guy's, 1 p.m.
MEDICAL AND CHIRURGICAL SOCIETY, 8 p.m.: Dr. Jenner "On the Determining Causes of Vesicular Emphysema of the Lung."
ZOOLOGICAL SOCIETY, 9 p.m.

14. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.
Orthopædic Hospital, 3 p.m.
NORTH LONDON MEDICAL SOCIETY, 8 p.m.: Nomination of Officers.
Council meeting at 7.
ASSOCIATION OF MEDICAL OFFICERS OF HEALTH, 4 p.m.
MICROSCOPICAL SOCIETY, 8 p.m.
ETHNOLOGICAL SOCIETY, 8½ p.m.

15. *Thursday.*

Operations at St. George's, 1 p.m.; Middlesex, 12½ p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.
ROYAL SOCIETY, 8½ p.m.

16. *Friday.*

Operations at the Moorfields Ophthalmic, 10 a.m.; Westminster Ophthalmic, 1½ p.m.
WESTERN MEDICAL AND SURGICAL SOCIETY, 8 p.m.: Dr. Edward Smith. "On the Curable Stage of Phthisis."

ORIGINAL LECTURES.

A COURSE OF LECTURES
ON THENATURE AND TREATMENT
OF THE DISEASES OF THE EAR.

DELIVERED AT

St. Mary's Hospital Medical School.

By JOSEPH TOYNBEE, F.R.S.,

Aural Surgeon to St. Mary's Hospital, Lecturer on Aural Surgery at St.
Mary's Hospital Medical School, and
Consulting Aural Surgeon to the Asylum for the Deaf and Dumb.

(Reported by JAMES HINTON, Esq.)

LECTURE IX.

MEATUS.

Osseous Walls.—However little it may have hitherto attracted the attention of the Profession, there is reason to suppose that the growth of osseous tumours in the external meatus of the ear, is a disease of no infrequent occurrence. Such tumours may be developed in any portion of the length of the tube, but the part from which they most commonly originate, is about the middle third of the passage. In one case, however, noticed below, the tumour extended beyond the outer orifice of the osseous meatus, and could be felt by placing the little finger at the meatus. Occasionally the posterior wall affords the point of origin to the tumour, and then it not unfrequently resembles a simple bulging of the wall. In other cases a similar tumour is developed from the anterior part, and the two protuberances meet and lie in contact in the middle, leaving an inferior and superior triangular space in the place of the original opening of the tube. Sometimes the external surfaces of the tumours are in contact for nearly the entire length; and the only passage is a small orifice below. The tumour may also be developed from the upper surface of the tube, and by gradually increasing in size, almost or quite fill up the passage. Two or more tumours, again, are sometimes developed from various parts of the circumference of the meatus, and, converging towards the centre, fill up nearly the whole cavity.

As far as my opportunities of observation during life have permitted examination, these tumours appear to consist of extremely hard and dense bone. In one case, where a portion of the bone was denuded of membrane, it appeared shining, white, and polished like ivory. In another, where, under the misapprehension that the body was a polypus, caustic had been applied so as to expose the bone, the latter was found to be extremely hard and devoid of sensibility. In a third instance, where I observed the membrane to be absent, there was a thin layer of cartilage on the surface, beneath which the bone was very hard.

The tumours are usually covered by the lining membrane of the meatus, which is frequently thick, spongy, and less sensitive than is natural. When, by irritation, chronic inflammation is set up, this membrane pours forth a discharge whose odour is most offensive.

The development of these tumours is frequently unattended with any symptoms calculated to attract the attention of the patient, and therefore it is only when by their increase of size they act as an impediment to the passage of sonorous vibrations to the membrana tympani, that the patient is inconvenienced by deafness, and applies for relief. Deafness may result in these cases first from a collection of cerumen or epithelium lodging in, and blocking up, the small passage of the tube left unoccupied by the tumours; secondly, a drop of water may have entered the ear during the ordinary ablutions, and produced the same effect; thirdly, the growth of the tumour may have proceeded unchecked till the entire cavity of the meatus is filled up. In some cases, however, the growth of the tumours produces a feeling of distension in the ear, and weight on the affected side of the head; while in others, again, they appear symptomatic of, and consequent to, exostosis forming in the deeper regions of the ears; as, for instance, in the tympanic or vestibular cavities—a condition

which I have sometimes met with in the course of my dissections. In three of the cases subsequently cited there seemed great probability of this being the case, and the distressing noises and sense of giddiness may probably have depended upon the pressure exerted on the expansion of the auditory nerve by an exostosis in the vestibule.

The only diseased substance with which the tumours are likely to be confounded are polypi; with very slight attention, however, they may readily be discriminated. When inspected by means of the speculum, the polypus is seen to be darker in colour, and glistening, from being generally lubricated by discharge; the osseous tumour, on the other hand, is white, and though smooth, free from moisture. The base of the polypus also is generally narrow, while that of the osseous tumour is broad. Any doubt, however, is easily removed by the use of the probe, which being pressed against the bony protuberance, at once reveals its nature.

The disease under consideration may be divided into two classes, following the peculiar causes which seem to influence its development.

The first and most common class of cases is that in which the disease appears associated with congestion of the mucous membrane of the ear, as a result of rather free living. Most of the patients who have consulted me on account of it, were in the habit of partaking freely of wine.

The second class of cases showed symptoms indicative of disease in the cavities containing the expansion of the auditory nerve.

I will now proceed to give some indications of the course of treatment to be pursued. In those cases where the tumours occupy a considerable space in the tube, and the deafness depending upon the occlusion of the canal by the accumulation of cerumen or epithelium, it is important at once to remove past, and prevent future, accumulations. Where water penetrates into the orifice of the meatus, and fills up the only remaining previous portion of the tube, wool should be placed in the orifice of the meatus when the patient is washing. Should the membrane covering the tumour, as is not infrequent, be very thick, a certain degree of relief may be afforded by the application of remedies which shall reduce its substance. In one case of this kind, I was enabled to increase the size of the tube, and much improve the power of hearing, by applying a solution of nitrate of silver.

In order to diminish the size of the tumour itself, the best remedy is that usually employed by surgeons in osseous growths, viz., iodine. This medicine I have prescribed internally, and have applied it behind the ear, and also to the surface of the tumours, with great advantage. In some cases a large tumour was so much reduced as to allow of the passage of sonorous vibrations, and the patient regained in a measure that power of hearing of which he had been for many months deprived.

If further experience should establish the fact that these tumours can be arrested in their progress, especially at that early period when the area of the tube is but slightly diminished, much good may be accomplished, and much suffering relieved. And while there are many weighty objections to attempting the removal of these tumours by operation or by escharotics, there are none to the use of iodine and the other absorbent medicines, from which there is every prospect, by persevering use, of successful results.

In consulting authorities on this interesting subject, the only observations I have found in Kramer are the following:—

“They (Polypi) are even of cartilaginous and bony hardness.”

“A stalactite-shaped growth, hung from the superior surface of the meatus, very near the membrana tympani, and was of so remarkable a bony hardness and density, that it was impossible to pierce it even with the sharpest knife.”(a)

Itard, although he states that the principal causes of the diminution of the external auditory meatus are the enlargement of the osseous, cartilaginous, and membranous structures, forming the meatus, says:—

“I have never had an opportunity of observing the enlargement (*gonflement*) of the osseous part of the external meatus, and the extreme hardness which it possesses would tend to make this kind of alteration very rare.”(b)

(a) On the Nature and Treatment of Diseases of the Ear. Longman, 1847, p. 117.

(b) *Traité des Maladies de l'Oreille et de l'Audition*, 1821. Tome i. p. 328.

CASES.

Case 1.—Tumours in each ear attended by deafness; tumours diminished in size; deafness cured.—June 1848.—D. N., aged 65, for the last few weeks has been feeling somewhat deaf, especially in the left ear. This deafness is increased by an attack of cold, to which the patient is subject.

Right Ear.—Meatus partially filled with long growths; one rising from the anterior, the other from the posterior part of the meatus. Membrana tympani dull. Hearing distance less than that of a healthy ear.

Left Ear.—Meatus blocked up, except a small orifice the size of a crow-quill, by long tumours, which project from the walls of the meatus. The space left between these bony growths was occupied by a collection of cerumen, which being removed, the power of hearing was to a certain extent improved, though it was still deficient.

Considering that every attack of cold increased the deafness, and that the membrana tympani was dull, a thickened state of the mucous membrane seemed also indicated. I therefore resorted to the following course of treatment:—Alterative doses of blue pill were administered, and the surface of the meatus was washed with a solution of argenti nitras, one drachm to the ounce, every fourth or fifth, and afterwards every seventh day. This course of treatment was continued for three or four weeks, and the power of hearing was largely extended. The plan was resumed the following year, and the ultimate result was a perceptible diminution of the tumour, arising, as I believe, from a decrease in the thickness of the investing membrane; and the power of hearing was completely restored.

Case 2.—Tumours in both ears; deafness produced by the presence of a drop of water in the meatus.—July, 1846.—E. F., aged 60, has been so deaf in the right ear for some years, as to derive little use from it. Has several times lately become suddenly so deaf in the left ear, as scarcely to be able to hear a conversation. These attacks have usually come on in a morning after washing, and frequently lasted for some hours.

Right ear.—Two long tumours were observed in the meatus, occupying about one-half of its calibre. Membrana tympani dull.

Left ear.—Meatus.—Extending from the upper part of the meatus is a long bony tumour, which occupies two-thirds of its calibre. This tumour is covered by a thick soft membrane, excepting at one point, measuring about half a line in length and a quarter of a line in breadth. From the anterior and posterior parts of the lower half of the tube projected two small elevations of bone, about three-quarters of a line in thickness, in the direction of the larger tumours, so as to leave but a very small triangular space between them. The latter was the only opening by which the sonorous undulations could pass to the membrana tympani, and it was found that during the operation of washing, this space was liable to be filled up by water, and temporary deafness produced. I had not an opportunity of carrying out a course of treatment for the diminution of the tumours; but by adopting means to prevent the entrance of water into the meatus, the attacks of deafness were entirely prevented.

Case 3.—Tumour in the meatus of the right ear; orifice in membrana tympani of left ear.—Nov. 13, 1845.—P. H., aged 56. Eleven years since, when in Russia, fell asleep in a garden. The next day felt severe pain in the left ear. The pain lasted during fourteen days, when matter was discharged. Has had several attacks of pain in the left ear since that period, which have been accompanied by beating and singing.

About six months ago, being then in the West Indies, had an attack of pain in the right ear, which was followed by a diminution in the power of hearing; but there was no discharge. Two months since returned to England, when he recovered the use of the right ear entirely; the left ear being also improved. Within the last four days pain came on in the left ear, and rapidly increased, followed by pain in the right ear, and so great an extent of deafness in both ears, as to require him to be shouted to.

Right ear.—Meatus externus.—The middle two-thirds of the lower wall are occupied with a bony tumour, which fills half the calibre of the tube.

Left ear.—Meatus externus red and covered by discharge. Membrana tympani white, soft, and thick, with a small orifice through which air passes.

Case 4.—Osseous tumours in each ear; feeling of confusion in

the head.—November 4, 1848.—T. T., aged 38.—Last year deafness gradually came on in the left ear, with occasional attacks of deafness in the right. The deafness has of late considerably increased, and been attended also with a feeling of confusion and a sense of oppression in the head.

Right ear.—Projecting from the whole of the anterior and posterior surfaces of the external meatus are two osseous growths, which meet in contact in the centre of the tube. Hearing distance one foot.

Left ear.—Two similar tumours exist also in the meatus of this ear, but at the superior part they have so increased as to be in contact throughout, save a small orifice at the lower part. The deafness in this ear has been greatly increased by the presence of a small quantity of cerumen, which had filled up the small orifice just described. The deafness was temporarily relieved by the removal of the cerumen, but it was evident that the tumours would go on increasing until the entire passage of the meatus was blocked, unless remedial measures were at once adopted. No opportunity was, however, afforded me of attempting to carry them out.

Case 5.—Large tumour in left ear, causing deafness, diminished by the use of iodine.—February, 1849.—S. P., aged 17. States that deafness commenced in the left ear about two years and a-half ago, and has been gradually progressing, till at length he cannot hear at all with that ear. Sometimes there is a violent itching, followed by discharge, and the tube of the ear is so sensitive that the least touch produces exquisite pain. There is also a continuously unpleasant sensation, as if the ear were being distended. He complains of dulness of hearing in the right ear. Has been to various Surgeons and public Institutions, but without obtaining any relief.

Right ear healthy.

Left ear.—A large osseous tumour occupies the whole of the meatus, and is attached to its upper part. It is covered by the mucous lining of the meatus, which is about a third of a line thick.

Tincture of iodine was applied to the surface of the tumour, as also behind the ear, and 4 grains of iodide of potassium were given thrice daily for between two and three months. Great relief was the result; the size of the tumour diminished, the power of hearing greatly increased, the tube of the ear lost its unnatural sensibility, and the unpleasant feeling of distension completely vanished.

Case 6.—A tumour in the right ear, filling nearly the entire tube; slight protuberances in the left ear.—November 25, 1848.—J. S., aged 65. States that ten years ago he had a gathering in the right ear, accompanied by great pain and much discharge. Continued however to hear pretty well from that period till within about a month previous to applying to me, during which he has grown so very deaf that he cannot hear, unless the speaker approaches his mouth close to the ear.

Right ear.—The external meatus contained a collection of epithelium, which, having been removed, disclosed an osseous tumour, filling nearly the whole of the tube. The tumour projected from the upper and lateral surfaces, and nearly touched the lower wall of the tube. Watch not heard in contact with the ear.

Left ear.—The lower wall of the meatus presents two slight elevations, which are quite hard.

In this case alterative doses of blue pill were prescribed, and tincture of iodine was directed to be applied behind the ears. The result of the treatment, however, has not been communicated to me.

Case 7.—Tumour in the right ear, following the extraction of a polypus.—June, 1847.—Rev. J. D., aged 47, consulted me for a continued discharge from the right ear. He stated that, twenty years previously, after the forcible removal of a collection of wax from the right ear, he experienced great pain, which was followed by an offensive discharge that had lasted to the present time. Upon examination, a large, red, and firm polypus was perceived to occupy the whole of the meatus, nearly as far as the orifice. It was attached to the wall of the meatus, near to the membrana tympani, and on its removal the membrana tympani was found to be very thick and vascular, with a small orifice at its lower part. The discharge wholly disappeared.

In the month of July of the present year the patient again consulted me on account of a slight return of the discharge, accompanied by some degree of pain in the right side of the head, and an unpleasant sensation of fulness and pressure in the ear. Upon inspection the meatus was found diminished

to one half its natural size, by the growth of osseous matter from its walls, especially anteriorly and posteriorly, thus leaving merely a triangular opening, through which only the central part of the membrana tympani was visible, and that was white and thick.

I recommended the use of a strong solution of liquor plumbi to stop the discharge from the tube, and the application of the tincture of iodine behind the ear.

In this case there had been long-standing disease of the tympanic cavity, membrana tympani, and meatus, consequent on local injury. The disease was attended with so great an amount of deafness that it appeared as if the cavities containing the expansion of the auditory nerve might also be implicated.

Case 8.—A protuberance of the lower wall of the meatus in the left ear.—December, 1848.—L. E. H., aged 25. Ten years previously experienced a singing in the left ear, which during a cold became much worse, and was attended with a feeling of numbness. Has lately suffered from a cold which has aggravated all the symptoms in the left ear, and called forth a noise like a bell in the right ear.

Right ear.—Membrana tympani dull. Hearing distance two feet.

Left ear.—Meatus contained a large quantity of cerumen, upon the removal of which the passage was observed to be red. At the lower wall near the membrana tympani, there is a considerable bulging of the osseous wall. Hearing distance half-an-inch.

In this case the diminished degree of hearing in the left ear did not depend upon the enlargement of the external meatus, for there was no doubt of a thickening of the mucous membrane lining the tympanic cavity.

Upon bringing to a conclusion the observations on the diseases of the external meatus it will be well to draw your attention to the morbid conditions found upon the dissection of 1013 diseased ears. They were as follows:—

Containing a collection of cerumen	71
Containing a collection of cerumen and epidermis	9
Distended and dilated by a collection of cerumen	5
Distended and dilated by a collection of cerumen and epidermis	1
Containing a collection of cerumen and rye-seeds	2
Containing a collection of cerumen; the osseous walls being absorbed in parts	3
Containing a collection of cerumen and epidermis; the osseous walls being absorbed in parts	4
Containing a collection of cerumen; the osseous walls being absorbed in parts so as to expose the cavity of the mastoid cells	1
Containing a collection of hairs	1
Containing a collection of cotton wool	1
Containing a molluscous tumour	5
Containing a molluscous tumour; the osseous walls being absorbed in parts	3
Containing a molluscous tumour which projects through the bone into the cerebral cavity	1
Containing a molluscous tumour which projects into the mastoid cells	1
Containing a collection of pus	10
Containing a collection of pus mixed with epidermis	1
Having polypi growing from its walls	1
Having polypi growing from its walls, the bone being carious	1
The dermoid layer so much atrophied as to leave the bone denuded	2
The dermoid layer hypertrophied	2
The dermoid layer congested	7
The dermoid layer soft	1
The dermoid layer soft and red	2
The dermoid layer soft and detached from the bone	2
The dermoid layer soft and thick, the bone being carious	1
The dermoid layer ulcerated, the bone being carious	1
Osseous walls rough	1
Osseous walls carious	7
Osseous walls absorbed in parts	2
Osseous walls presented an orifice superiorly	3
Osseous walls presented an orifice inferiorly	1
Osseous canal much contracted	3
Having bony growths from the osseous walls; canal much contracted	14

ORIGINAL COMMUNICATIONS.

SUGGESTION OF A NEW CAUSTIC

IN THE TREATMENT OF

LOCAL CANCEROUS AND CANCROID DISEASES, Etc.

By J. Y. SIMPSON, M.D.

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WHEN cancerous or canceroid disease is situated within reach of surgical measures, and is still so local in its character and so limited in its extent as to justify its artificial removal, one of two methods is usually adopted in order to effect its extirpation, namely, either 1st, excision; or, 2ndly, cauterisation. Of late years the latter method, or the removal of some external forms of the disease by caustics or escharotics, has attracted the special and favourable attention of the Medical Profession, particularly upon the continent of Europe. Various causes have led to this result, but principally an increasing conviction among medical men, as proved by very ample modern surgical statistics and experience, that the excision of cancerous diseases is extremely seldom followed by a permanent cure. On the other hand, semi-malignant, if not malignant, ulcers and growths have confessedly—even after the knife has failed previously—been sometimes successfully removed by caustics;—too often under the use of secret applications, and in the hands of empirics and unprofessional persons; but frequently also, more especially in later times, by the agency of known escharotics and under the professional care of some of our most distinguished living surgeons.

The practice of cauterization, or the treatment of rodent and obstinate ulcers, the extirpation of superficial cancerous and canceroid diseases of the skin, lips, cervix uteri, etc. by escharotics, would probably greatly extend among the Profession, provided we possessed a caustic which was at once effective, and at the same time simpler in its mode of application, speedier in its action, and safer in its use than the caustics which have been hitherto used. It is with the hope of pointing out to my professional brethren a caustic possessing these properties that I venture to submit to them the present observations. But let me first speak briefly of the relative advantages and disadvantages of the caustics that at the present time are best known and generally adopted in practice.

CAUSTICS HITHERTO USED.

Different forms of caustic have been employed to destroy cancerous and canceroid parts, sluggish and intractable ulcers, etc. The principal varieties at present in use with the Profession are the following:—

I. *Concentrated alkalis*, as pure potassa, soda, and lime, or the combination of two of these, potass and lime, in the form of the Vienna paste, and the solid caustic of Filhos. These alkaline escharotics, however, though very useful in some other indications, are not frequently resorted to in the treatment of malignant ulcers and growths, as their use is often attended with oozing of blood, and their destructive power does not penetrate sufficiently downwards to kill and enucleate any very deep morbid tissues.

II. *Concentrated acids*, as the sulphuric, nitric, muriatic, etc. When applied in their liquid form these acids form most powerful and rapid caustics. It is difficult, however, or, indeed impossible, to control and limit their action within proper bounds, or to prevent their running and spreading to the neighbouring healthy surfaces and tissues, when they are applied at least with sufficient freedom to be actually useful. To render them more easy of employment in practice, attempts have been made to impart to them a comparatively solid consistence, by forming them mechanically into a kind of paste, with powders and other substances immediately before their application to the diseased parts. In this way Professors Rust and Velpeau have applied to canceroid and cancerous parts sulphuric acid made into a pultaceous mass with powder of saffron; and MM. Rivallée and Maissonneuve have used monohydrated nitric acid, solidified to the same extent with tow, lint, asbestos, etc. In such semi-solid forms these strong acids are not so apt to implicate the contiguous healthy parts, though they are still far from being very simple and manageable in their application.

III. *Metallic preparations.*—A variety of metallic salts and compounds have been employed as caustics; such as various compounds of arsenic, antimony, copper, mercury, platinum, gold, zinc, etc. etc.

Among all these metallic compounds, however, the two most frequently used at the present day for the treatment and elimination of ulcers and deposits of any great extent are arsenical preparations and chloride of zinc.

Arsenic.—The escharotic effects of arsenical preparations, when locally applied, were known to the ancients, and are alluded to by Dioscorides, Pliny, Celsus, and others. Arsenic is recommended, in the form of sulphuret, as a topical remedy in the cure of malignant and recurrent ulcers by various old Greek and Roman Physicians, as Galen, Aetius, Scribonius Largus, etc. In the 15th and 16th centuries it was employed by Fuchs, Valscus, Fernel, and others in the elimination of cancerous parts. They applied it in the form of white arsenic or arsenious acid, diluted and mixed with soot and various vegetable and other powders. In later times it has been used under the same form by many distinguished Surgeons in the extirpation of cancerous ulcers and structures. It has formed the basis, also, of most of the secret topical remedies or caustics for the cure of cancers that have at different times been in vogue; as, for example, those of Müller, Martin, Von Campen, Chonet, Katzenbergen, Plunkett, Guy, etc. The form in which arsenic has chiefly been employed in later times as an escharotic is as arsenious acid; and the caustic powder or paste employed has usually consisted of a small per-centage of this preparation, compounded and diluted with various other materials. The celebrated anti-cancerous caustics of Frère Côme, Rousselot, Justamond, Hellmund, Heyfelder, Anthony Dubois, etc., severally consist of white arsenic, mixed up with cinnabar, dragon's-blood, or the resin of the *Pterocarpus draco*, charcoal, etc., and made, before their application, into a paste or pomade with water, saliva, mucilage, or white of egg. Dupuytren's arsenical powder consisted of from one to five or six parts of arsenious acid, mixed with a hundred parts of calomel. The caustic of M. Manec, which is extensively employed in France at the present day, is formed of one part of arsenious acid, seven or eight parts of cinnabar, and four parts of burnt sponge, formed into a paste with a few drops of water.

One disadvantage connected with the topical use of arsenic as a caustic is the great amount and duration of local pain and irritation which it often produces. M. Lebert, who has had repeated occasion, as he tells us, to witness and watch the successful employment of Manec's arsenical paste by M. Manec himself, and who believes this caustic to be the best yet suggested, nevertheless states, that when used as an escharotic the immediate action of arsenic is "one of the most painful means in surgery. Already," says he, "at the end of some hours violent pains commence in and all around the part, tumefaction at first, and subsequently an erysipelatous-like inflammation speedily succeed the pains, and it is only towards the end of five, six, or eight days that this general and extensive inflammation begins to diminish. During all this time," he adds, "the sufferings are sufficiently great to deprive some patients of all rest and sleep, and ten or fifteen days may elapse before these complications disappear."—*Traité Pratique des Maladies Cancéreuses*, page 646.

But a still graver objection exists to the use of arsenic as a caustic, viz., the danger of its absorption into the system, and of its subsequent action as a poison upon the patient, particularly when, as an escharotic, it is applied either too frequently or too freely to a surface of any considerable extent. Besides, there is singular uncertainty in the effects of arsenic when thus locally applied. A patient of Professor Roux's was fatally poisoned by the application, for a single night, of an arsenical paste containing four per cent. only of arsenic, to a small mammary ulcer only one and a half inch in diameter. Numerous instances have been observed in which vomiting, diarrhoea, colic, and other symptoms of arsenical poisoning have followed the external application of arsenical preparations. "Its use," says Dr. Pereira, "is always attended with some danger." Sometimes the patient has, like Roux's, died after its topical application as a caustic; and with all the symptoms that follow the internal administration of the poison. Medical literature has on record a large number of such fatal cases. In speaking of the occasional danger attendant upon the local external use of arsenic as an

escharotic in cancer, Sir Benjamin Brodie observes, "An old Medical Practitioner, whom I knew in the early part of my professional life, informed me, that it had fallen to his lot to see many of Miss Plunkett's patients, and that after the application of her caustics, many of them died, from what seemed to be inflammation of the bowels."—*Lectures on Various Subjects in Pathology and Surgery*, page 335.

Chloride of Zinc.—This preparation of zinc appears to have been first used surgically by Dr. Papenguth, of St. Petersburg, who recommended the application of a solution of it as a lotion for scrofulous ulcers and fistulæ. As an escharotic, in the treatment of malignant and semi-malignant ulcers and deposits, it was subsequently employed by Professor Hancke, of Breslaw; and afterwards still more extensively, and for a time as a secret remedy, by Dr. Canquoin, of Paris. It was specially urged upon the attention of English Surgeons by the writings of Dr. Alexander Ure; and during the last ten or twenty years it has been very frequently used in this country. It will only act upon an open or exposed surface, and not when the epithelium is entire. It is, however, a very effective, valuable, and safe escharotic, killing the morbid tissues to which it is applied to a depth corresponding with the thickness of the layer of chloride that is superimposed, and rarely or never being followed by any serious constitutional disturbance or disorder from the local absorption of the drug. Some degree of fever, however, according to Canquoin, occasionally follows the application of chloride of zinc, and, indeed, of all other caustics, when the cauterization is extensive. Professor Macfarlane states, that in two cases under his care there occurred both fever and severe gastro-enterite, which he attributed to the action of the drug. The principal drawback, however, to its employment is its great tendency to deliquesce and spread; and in order to prevent any inconvenience or evil effects from this property, it is generally recommended, immediately before its application, to work the chloride up into a paste with flour and water, or gypsum and water, in quantities varying according to the strength of the escharotic that may be required; the usual proportions being one part of the chloride to two, three, or four parts of the flour or gypsum.

Besides the chloride of zinc, other chlorides have sometimes been employed as caustics, as the chlorides of antimony, gold, platinum, etc. Of late years Professor Landolfi, of Naples, has employed extensively, in various Hospitals in Europe, a compound of chlorides as escharotics; and, according to some reports, with much success. His caustics consist of varying quantities of chlorides of zinc, antimony, and gold, combined with chloride of bromine; and worked into pastes with powdered liquorice root. Of these ingredients the most novel, and the one to which Landolfi attaches most importance, is chloride of bromine. He sometimes uses it alone as a fluid caustic. There are two inconveniences connected with its employment, either when used by itself or in combination:—1. The caustic is liable to spread, and the neighbouring parts must be properly protected from its action by being well covered with cloths or bandages immersed in appropriate ointments. 2. It requires to be formed immediately before its application; and the fumes that arise are so stifling as to prevent this being done within doors. On this last point a recent writer, Mr. Gamgee, who has watched and witnessed Landolfi's own practice, observes:—"In consequence of the very intensely irritating power of the fumes emitted from the chloride of bromine, care must be observed in dealing with it. Thus, the paste should be prepared in the open air, with the mouth covered; and during, and for a short time after its application, the patient should sit near an open window."—*Researches in Clinical Surgery*, p. 87.

The caustic to which I desire to call the attention of my Professional brethren, and which I have used often during the past year, is free from these and most other drawbacks. It consists of sulphate of zinc, applied either in the form of powder, or strong paste, or ointment to the affected part.

SULPHATE OF ZINC AS A CAUSTIC.

Sulphate of zinc is a drug extensively and daily employed by Medical men in solution, in the form of collyria, of lotions, of injections, etc. No writer, however, has, as far as I am aware, hitherto pointed out that when applied as a fine powder to an open and diseased surface, sulphate of zinc acts as one of our most powerful and manageable caustics. In using it for this purpose I have always employed it dried or

anhydrous, and finely levigated. Sometimes I have applied it in the form of a simple powder, sometimes in the form of a paste made with glycerine, and sometimes as a strong ointment. To work it into a paste, about one drachm of glycerine to an ounce of the dried powder is required; and in this form it keeps for any length of time ready for use. A caustic ointment may be formed by pounding together two drachms of axunge with an ounce of the dried sulphate of zinc.

When used in the form of a powder, paste, or ointment to an open or ulcerated surface, the part to which it is applied is rapidly destroyed to a depth corresponding to the thickness of the superimposed layer. The slough, eschar, or devitalized part is of a white colour, and usually separates on the fifth or sixth day, leaving behind it (if the whole morbid tissue is removed) a red, granulating, healthy, and rapidly cicatrizing wound. I have sometimes seen the edges of the wound already more or less puckered and contracted at the time of the separation of the eschar. The white slough or eschar itself shows no tendency to chemical or putrefactive decomposition, but is firm in texture and free from taint or odour. If we apply the sulphate of zinc in any case of malignant or semi-malignant ulcer or deposit it will require to be repeated immediately after the first or preceding eschar separates, provided any yellow or unhealthy tissue remain at the bottom or in the sides of the wound, or if the surrounding hardness is not yet quite dispelled. After the last eschar is removed the remaining wound or sore will rapidly heal up under any common applications, as black wash, astringent lotions, water dressing, etc.

Sulphate of zinc, like chloride of zinc, will not act as a caustic where the epithelium is entire, or unless it be applied to a broken or open surface. This is at once an advantage and a disadvantage; an advantage in so far that it prevents all fear of the caustic ever unnecessarily affecting any of the healthy contiguous surfaces and parts, and renders its application and use far more simple and certain; and a disadvantage, because when we wish to apply it to a non-ulcerated structure, we must first remove the intervening epithelium by a small blister, or more effectually by the application of an alkaline or acid caustic. A paste made with sulphuric acid and powder of sulphate of zinc will both, perhaps, at once remove the epidermis, and give at the same time the action of the mineral caustic. If too liquid it may be prevented from spreading beyond the desired spot by enclosing that spot within a circle of oxide of zinc powder, or within a ring made with an oxide of zinc paste.

The local inflammatory reaction around a sulphate of zinc eschar is generally slight and transient. I have never witnessed any very marked effusion or swelling in the surrounding parts, except where the caustic was used in the neighbourhood of parts containing a large quantity of loose cellular tissue. Nor have I ever seen the general system affected by any absorption of it, or any special constitutional symptoms or disorder follow the topical application of sulphate of zinc, however freely and lavishly used. Like other strong caustics, its action is usually, but not always, attended for a few hours with considerable local pain and burning. This local suffering, however, generally disappears more rapidly with sulphate of zinc than with arsenic or chloride of zinc, and may always be relieved when necessary by the temporary use of anæsthetics or opiates, or by applying locally along with it, or before it, a very small quantity of sulphate of morphia. The devitalized part or eschar also produced by sulphate of zinc separates sooner than after most other caustics. The eschar made by arsenious acid seldom separates before the sixteenth or eighteenth day; that made by the chloride of zinc usually separates from the tenth to the twelfth day. I have generally found the eschar made by sulphate of zinc to separate as early as the fifth or sixth day.

The advantages of the sulphate of zinc, as compared with other caustics, are, therefore, in general terms:—1. Its powerful escharotic action; 2. The rapidity of its action; 3. Its great simplicity and manageableness; 4. Its facility of application; 5. Its non-tendency to deliquesce or spread; 6. Its perfect safety; and, 7, I believe I may add, its efficacy.

On this last point, however, more experience will require to be accumulated than I can yet offer. But I have seen not only the surface of canceroid or cancerous ulcers speedily and perfectly excavated by its application, but the surrounding characteristic induration become at the same time rapidly absorbed, and the remaining wound very speedily cicatrize. I

have seen, more than once, ulcers with irregular everted edges, dirty cavities and indurated bases and sides, and which had been open for years, become quite softened, closed, and healed over within five or six weeks after the first application of the caustic. In spreading epithelial or canceroid ulcer of the cervix uteri, I have found in as brief time, under the free local application of powdered sulphate of zinc, the ulcerated surface exfoliated, the sanguineous and sero-purulent discharges arrested, the parts temporarily, at least, if not permanently, cicatrized, and healed, and the patient's health, strength, and spirits restored, though, when first inserting the caustic, I believed the disease to be altogether beyond the reach of any remedial measures.

Let me add here, that I have tried as caustics other metallic sulphates besides the sulphate of zinc. The sulphates of iron, nickel, etc., have a similar escharotic action, without presenting, as far as I know, any special claims or advantages.

In a preceding paragraph it has already been remarked that many of the most famed secret pastes and applications that have at different times and in different countries been in fashion for the cure of cancer, contain arsenical preparations as their essential and efficient base. Perhaps it may be found that sulphate of zinc is the principal ingredient in other secret caustic remedies. A few days ago, after showing some examples of the caustic properties of sulphate of zinc to Dr. Johnston, of Worcester, Massachusetts, during a brief visit which he paid to Edinburgh, that gentleman stated to me, that from accidental information which he had obtained from a druggist, he believed sulphate of zinc to form the basis of one, if not more, celebrated secret American applications for the cure of cancerous disease.

Caustics are often used in practice for other purposes than the extirpation of cancerous and canceroid malignant and semi-malignant ulcerations and deposits; and I have successfully employed sulphate of zinc in fulfilling most of the indications for which escharotics are resorted to, as for example—

1. In the treatment of indurated inflammatory ulcers of the cervix uteri. To this part it can be readily applied, either through a speculum, or still more easily by means of a small ivory or wooden cylinder and piston, like the common leeching tube, or like Dr. Locock's glass tube for carrying silver solution; or in the form of a medicated pessary, made up with a small quantity of axunge or glycerine.

2. In cases of lupus and rodent non-malignant ulcers of the nose and face, and other integumental parts. Here we must not forget Rayer's rule, that not one, but a succession of applications of any caustic, is generally necessary for ultimate success.

3. In the annoying and intractable ulcerous forms sometimes assumed by certain cutaneous affections. Thus, I have seen it arrest a case of *Impetigo Rodens*, which, in despite of various applications, had gone on progressing for two years.

4. In eating down the small red sensitive tumours so common at the orifice of the female urethra, and in the neighbouring vulvar mucous surfaces.

5. In destroying ulcerated condylomata and warty excrescences.

6. In several cases I have easily introduced the sulphate of zinc and glycerine paste, by means of a small catheter-like tube and piston, into the proper cavity of the uterus, to cauterise the open surfaces and diseased structures leading to obstinate menorrhagia; and which deep points it is, I believe, sometimes difficult, or indeed impossible to reach with any other efficient caustic. In the uterine cavity, as elsewhere, sulphate of zinc acts only upon any abraded and diseased surfaces that exist, and not to any extent upon the parts covered with healthy mucous membrane.

7. I have tried to take advantage of the highly contracting power of the cicatrices left by sulphate of zinc in the replacement and sustentation of chronic prolapsus of the uterus and bladder.

It will, perhaps, be found also adapted to the treatment of some obstinate ulcers of the limbs, and to the early cauterisation and destruction of syphilitic chancres and pustule maligne.

Other practical applications of sulphate of zinc as a caustic will, no doubt, betimes suggest themselves to the minds of the clinical Surgeon and Physician.

(To be continued.)

LEUCORRHOËAL OPHTHALMIA, AND OTHER CASES OF INFANTILE LEUCORRHOËA.

By W. R. WILDE, F.R.C.S.I.

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THE readers of this Periodical, no doubt, remember the cases of infantile leucorrhœa which occurred in Dublin about three years and a half ago, and which attracted such general attention from the circumstance of the evidence given by the police authorities, and the strenuous endeavour made by the Crown lawyers to ensure a conviction, in the teeth of the opinions of such men as Cusack, Beatty, Grogehan, Churchill, and others. In the papers which I communicated to the *Medical Times and Gazette*, as well as in the little work which subsequently appeared upon the subject (a), the question was mooted as to the infectious nature of the disease, and also whether it was communicable from the child to the adult male or female.

In a paper contributed to the *Lancet* by Mr. Moss, of Windsor, in December, 1835, we find an account of a whole family being affected with the disease known as Leucorrhœa, and, says the Report, the grandmother, a woman aged 63, who resided in the house with the diseased children, "was afflicted with one of the most frightful attacks of purulent ophthalmia, which was supposed to be induced by infection from her grandchildren." This was the only case published at that time, with which I am acquainted, where it could be supposed that purulent ophthalmia has been induced by applying some substance infected with the matter of infantile leucorrhœa to the eyes, as occurs in cases of gonorrhœa.

During the summer of 1855, however, I had an opportunity of witnessing the effect of the direct application of the virus from the genitals of one person to the eye of another, a second case very similar to which is now under my care.

The epidemic of 1853 commenced in this city, as my readers are no doubt aware, in the month of June, when the weather was remarkably warm; and about the same time in the year 1855, some cases of infantile leucorrhœa presented, among which was one in the practice of a Surgeon of great eminence in this city, that, but for his vast experience and judicious advice, might have resulted in much domestic unhappiness. A lady and a gentleman both became affected with a discharge from the genitals; in the female, however, the disease was more virulent, and presented all the symptoms of vaginitis, with the usual excoriations and incrustations consequent thereon. The lady accused the gentleman, and the gentleman the lady. Mutual recrimination ensued, and both parties, strong in their own innocence, felt aggrieved and insulted. Fortunately the police authorities were not consulted in this dilemma, otherwise we might have had it brought before the gentlemen of the long robe, to eventuate, perhaps, in an appeal to the House of Lords. Each party appealed to the Surgeon, who, on examining into the state of the case, expressed a desire to see the children, when he found that a girl, eight or nine years of age, laboured under well-marked symptoms of infantile leucorrhœa; that she had slept with her mother, had evidently infected her, and that the mother had given the disease to the husband.

Towards the end of June, 1855, I was brought by Mr. O'Flaherty to see a case of purulent ophthalmia in the person of a female child, aged 7, belonging to a gentleman connected with the Medical Profession. The upper lid of the right eye was intensely swollen, and presented all the characteristics of virulent purulent ophthalmia; but the usual florid hue and tense shining surface commonly seen in the early and active stage had been replaced by the flabby skin and purplish tint generally indicative of sloughing cornea, and which always ensues upon the supervention of this mischief in that structure. A profuse purulent discharge poured from between the lids, which clotted upon the cilia and spread over the cheek; there was not much pain experienced, but considerable fever, characterised by white tongue, hot skin, restlessness, and anorexia was present. The lower lid was also œdematous, but in a comparatively minor degree. There was chemosis

of the conjunctivæ, and a most profuse purulent discharge. On getting a glimpse of the cornea a considerable portion of it was found to have lost its polish, and to have assumed the usual ash-coloured appearance characteristic of the destructive process so well known to those conversant with eye diseases. Local depletion, the application of the nitrate of silver in solution, astringent washes, mercurial alteratives until the tongue cleaned, and then the use of bark, were all put in requisition. At first I was in hopes that a process which I have often observed in gonorrhœal ophthalmia, the progress of which had been checked by active measures, would have occurred, and that the external lamina of the cornea alone would have scaled off, leaving a clear surface beneath, or that perforation having taken place at some one point, adhesion of the iris with leucoma would have resulted. The result, however, was not so fortunate; a considerable portion of the cornea sloughed in a short time, and partial staphyloma resulted.

The most curious and instructive portion of this case has yet to be told. On Friday, the 2nd of June, the mother of this little girl discovered that her younger sister, then not quite two years old, had a profuse purulent discharge from the genitals with excoriation and incrustation of the neighbouring parts, and all the other symptoms of infantile leucorrhœa, which are here unnecessary to detail. Aware that such appearances are not uncommon in young children, she made no outcry about it, but, having reprimanded the nursery-maid for not having informed her of the fact, at once commenced to wash the child with her own hands, using the large nursery sponge for the purpose, and applying it freely to the genitals. Upon the night following, Saturday the 3rd, she washed both children herself before their going to bed, and freely used the same sponge in washing the elder child's face and eyes. The next four days followed without remark, the sponge being used with both children indiscriminately. Upon Thursday morning, the 8th, symptoms of inflammation were observed in the left eye of the elder child, and I saw her upon Monday, the 12th, labouring under the symptoms described in the foregoing.

Upon examination of the younger child it was found to be labouring under subacute vaginitis, consequent apparently upon impaired general health. The disease lasted several months, and only yielded to change of air, the use of tonics, and consequent improvement of the constitution.

From the foregoing we learn what has long been suspected, that this is a highly contagious disease, and if such be the case with respect to the eye, I should think it is equally so as regards the male urethra. If then a man or boy has attempted violence in the case of a child or girl labouring under this disease, the chances are that he will receive infection; but if an accused person does not present any appearance of infection, I think it should tell equally in his favour, as if he had been accused of an assault upon the person of a female who was found to be labouring under gonorrhœa, but by whom he was not contaminated. Such cases have occurred. Perhaps experiments may yet be made to test this question as to the communicability of the disease between the sexes.

While transcribing the foregoing case during the present month the following occurred:—Mr. Daly, one of the general practitioners of this city, when attending a family residing in rather an unhealthy locality on the banks of the canal, and among whom a remittent fever had prevailed for some time previously, was required to see one of the children, who was labouring under inflammation of the eye upon Monday, 21st December. He found the eye very red, with some tendency to chemosis. He applied two leeches, and subsequently an astringent lotion. The cornea was then bright and clear. Upon Tuesday morning there was great œdema of the eyelid, with purulent discharge, and he applied three more leeches. At three o'clock that day I met him in consultation. The child, a female, six years old, had light hair, blue eyes, delicate skin; the limbs were rather wasted, the extremities cold and more than usually hairy; pulse quick, but weak; tongue flabby and coated by a putty-coloured secretion; countenance anxious and fretful; total loss of appetite. There was great œdema of both upper and lower lids; their surface a purplish red; a mucopurulent discharge clotted the cilia, and a thin straw-colour and reddish discharge poured over the cheek from between the swollen lids.

Some of the œdema which was present upon the cheek may have been produced by the leeches, but that on the lower lid

(a) See Medico-Legal Observations upon Infantile Leucorrhœa, arising out of the alleged cases of felonious assaults on young children recently tried in Dublin. Churchill: London, 1853.

was undoubtedly the result of disease. It was not possible, upon separating the lids, to get a view of the cornea when I saw the child, about 3 o'clock. The most that could be seen, when the ichorous discharge was washed away, was a stratum of firm red chemosis. A solution of nitrate of silver, 5 grains to the ounce, was ordered to be dropped into the eye twice a-day; the bowels to be freed by aperient medicine; a tea-spoonful of syrup of bark to be given twice in the twenty-four hours, and a lead lotion to be applied to the eye, from which organ the discharge was to be washed away as frequently as possible. Diet light and nourishing. When leaving the house I mentioned to Mr. Daly how very like the case was to one of leucorrhœal ophthalmia which I had seen before. At our next visit, on Wednesday, the 23rd, I mentioned my suspicions to the mother, and requested permission to examine the child. I found her labouring under well-marked infantile leucorrhœa, which the nurserymaid said she had first become aware of on the previous Saturday by observing the stains on her linen; and that, on examination, she found she had a profuse discharge; she washed then her, and repeated the ablution on the evening of that day. On the next day (Sunday) she first remarked a redness of the eye, attended with a discharge coating the eyelashes.

Upon examination of the genitals on the morning of Wednesday, the 23rd, we found all the parts covered by mucous membrane, red and swollen; the clitoris of a purplish hue, and nearly twice its natural size; a profuse discharge, precisely similar to that secreted by the conjunctiva, flowed from the vagina, and spread over all the adjacent parts. The margin of the anus seemed somewhat more than usually red. An astringent lotion, with frequent ablution of the parts, was ordered.

After carefully washing of the eye, I was enabled to obtain, through the swollen lids, a glimpse of the cornea bright and shining. A ten-grain solution of nitrate of silver was then employed, the bark was continued internally, and the lead lotion applied externally. The pulse, skin, and general look of the child were improved. The bowels had been freely opened; the tongue was somewhat cleaner.

25th.—The lids were not quite so much swollen or red; the discharge was, however, profuse and quite purulent. With some difficulty a glimpse of the still clear cornea was obtained. The local and general remedies were continued, and a generous diet ordered. The discharge from the genitals was like that from the eye, more purulent and profuse than on any former occasion, but the symptoms of inflammation were less.

26th.—The general appearance of the child had greatly improved; skin natural; pulse firmer and slower; countenance cheerful; tongue very much cleaned. Œdema of upper eyelid very much less, the lead lotion having deposited a white precipitate upon it, its colour could not be seen, but the child was able to elevate it a little. The œdema of the lower eyelid had nearly gone; the discharge was lessened in quantity, and did not pour over the cheek when the lids were separated.

The chemosis had subsided, and the cornea could be thoroughly inspected. It was transparent throughout; towards its lower edge, but not including its margin, a large oval chip has been removed, as if it had been gouged out, having a sharp edge, and leaving its surface beneath perfectly transparent. This occurred, I presume, from slough, which took place between the time Mr. Daly saw it on Monday and the same hour upon Wednesday morning, when, as has been remarked, the cornea in that situation was found to be clear. This breach of surface is seen most perfectly in profile, and is that which I alluded to in the foregoing case, as sometimes occurring in gonorrhœal ophthalmia, where the whole extent of the corneal structure is not lost. The condition of the genitals was as remarkable as that of the eye; the swelling and discoloration of the clitoris was much less; the labiæ were nearly natural; the discharge had considerably abated, and did not now spread over the neighbouring parts. The only alteration made in the treatment was the substitution of the compound alum liquor in solution for the salt of lead, lest the latter might be deposited upon the denuded portion of the cornea,—and the application of a five instead of a ten-grain solution of nitrate of silver. A still more generous diet than heretofore was prescribed. Subsequently the iris became affected, and symptoms of general internal inflammation ensued. Removed to a more healthy locality; the use of the bichloride of mercury with bark, and the dilatation of the

pupil by atropine, succeeded in arresting these impending dangers. The gap in the cornea is filling up, and the leucorrhœal discharge has nearly subsided. General health greatly improved.—January 12, 1857. The final result of this case I will communicate at a future period.

During the office of the late Attorney-General a case of a suspicious nature occurred in the country, but instead of directing the whole force, and, let me add, ignorance of the law, to be brought to bear against the accused person, he ordered the Crown Solicitor to lay the facts before a Medical man in the metropolis, versed in such cases, before the prosecution was instituted. That I look upon as a great step in advance. The case was not tried; not so, however, the following:—

A very well conducted man, employed as a ticket-taker in the parcel-office at one of the principal railway termini in this city was taken out of his bed last January twelvemonth upon a warrant granted by one of the railway directors, a magistrate of the city of Dublin, upon a charge of felony, viz.: that, upon the previous Christmas-eve, at a quarter before six p.m., when there is the greatest rush, perhaps, of any hour of the year upon the time of the railway officials of all classes, he committed a felonious assault upon a girl about nine years of age in the stall or parcel-office of said railway-terminus, underneath a fierce burning gaslight, and with the possibility of a very large crowd of passengers as well as the railway officials looking in upon him—the child receiving as a reward one penny!! Such was the indictment that this man was suddenly called upon to plead to in the Police Office at College-street. The circumstances which induced the prosecution are almost precisely those described by Cooper, and to which I have so frequently referred in my former communications. The parents of the child resided on the railway premises, the father being a pensioner from the police force. About ten days after Christmas, no accusation having been made by the child, the mother discovered that her linen was greatly soiled; and instituting further inquiries found the child labouring under a profuse purulent discharge from the genitals, with the usual marks of inflammation, excoriation, &c. She questioned the child as usual, and failing in her inquiries as to who had committed violence on her, at last arrived at the fact (a perfectly true one) that the ticket-taker had given her a penny on Christmas-eve, “her Christmas-box,” and that she had come to him for it shortly before the train started at six o'clock on the evening in question. The child was hastily snatched up and carried off to a neighbouring practitioner, who, to say the least of it, did not allay the mother's fears. The child was then carried to a Surgeon, who shortly afterwards informed me that he had endeavoured to persuade the mother that she had formed a hasty and, perhaps, an erroneous opinion respecting the violence which she thought had been offered her child. The prisoner was called up, and the charge against him stated by counsel; the man was totally unprepared with any defence, except that of strong denial. The magistrate humanely remanded the prisoner for another day. Going in accidentally to the office of the Commissioners of Police next morning, I heard that a trial for a felonious assault upon a little girl was being heard at the College-street Police-office. Thither I hastened, and learned the foregoing details. The court was densely crowded, particularly with females. The mother had, I understood, been put out of court for prompting the child, who was then under examination, and who, shortly after I came in, acknowledged that her father had told her the name of the man she was to swear against as they walked down to court. The plaintiff, a most intelligent little girl, was an admirable witness; she was not shaken in the slightest by the cross-examination, although carried on with great ability, and without the least attempt at bullying by the prisoner's counsel.

My friend Dr. Ireland and I were then examined, and upon this occasion we were quite agreed. It was then proposed that the plaintiff should be examined by Dr. Ireland and myself, with respect to the question of violence, but this the father of the child peremptorily refused.

At this stage of the proceedings, Mr. Strong, the presiding magistrate, took up the examination of the child in a very quiet tone, and bringing her back to some of the minor details, especially with respect to the penny, she very soon forgot the story, and presently contradicted her previous evidence in many important particulars. The magistrate dismissed the case, and exonerated the prisoner, and thus saved the country the ex-

pense of a trial, and the demoralization consequent upon the recital of all the minutiae of a felonious assault given by this little child before a crowded court at the next commission. The Railway Directors instituted an immediate inquiry, which resulted in the restoration of the ticket-taker to his office, and the expulsion of the plaintiff's father and family from the premises.

The last case which came under my notice is as follows:—Upon the premises of a large commercial house of this city lived two families of upper-class tradesmen, A and B. B was married to A's daughter. He had no children of his own, and appeared to be very fond of his little sisters-in-law, one aged 2, the other about 7. The latter used often to sit in his lap, and had frequently expressed her extreme fondness for him. Between B and her elder brother, however, who was connected with a Medical establishment in Dublin, there was not so much cordiality. One day, in the spring of the year, the mother remarked the linen, first of the elder, and then of the younger child soiled, and upon examination found them both labouring under purulent discharge from the vagina. She immediately took the elder child to Dr. Hardy, her usual family attendant, who explained to the mother the nature of the disease; and, as the child was in ill-health, and the locality she inhabited was evidently unwholesome, he recommended change of air. This was the more easily effected, as her brother, already alluded to, was lodging in the suburbs for the benefit of his health. Some two or three months after this, and while the child was still under Dr. Hardy's care, the medical attendant of the student brothers came in, and he was requested to examine the child, as some strange suspicions as to the disease under which his little sister laboured, having been caused by violence or infection, were evidently weighing upon the young gentleman's mind. The Medical man, unfortunately, assented to the idea that the child might be labouring under gonorrhœa. Then came the process, first of inquiry and afterwards of demoralization, all the painful proceedings of which were subsequently described by the agonized mother at a Medical investigation. For weeks the child adhered with remarkable pertinacity to her simple truthful tale, that no one had meddled with her. Threats, promises, coaxings, terror and persuasion were tried in vain by the weeping mother upon this most engaging little child. Still the brother and the doctor adhered to their opinion, then expressed to both father and mother that she was "clapt." They could not expect her to tell by whom, although a certain name was continually presented to her. Finally, after this good child had withstood the temptation to lie for many weeks, she gave in. Men and women—aye, and of high principles too—have, when sore pressed, done the same. The child either began to believe what was so frequently told her, or cared no longer to uphold a truth for which she got no credit. The father was informed of the confession, and rushed in a frantic manner to the principal of the establishment, demanding vengeance. The principal sent off for the Doctor, the same who had previously attended the brother, and he confirmed the frightful accusation. Bloodshed might have followed; if the accusation was true, one would hardly wonder that violence should ensue. A child of tender years deflowered and diseased by its own brother-in-law, in the very room adjoining her mother and his wife! The parents and the brother of the child, together with the head of the establishment, called lustily for the police; and but that one of the clerks in the establishment, a man of great good sense, experience, and knowledge of the world, entreated a little delay, we should have had it before the commission in a few days. For the credit of the establishment, and for the honour of human nature, as the clerk subsequently explained to me, he prevented further mischief by getting the accused man and his wife, (the child's sister,) to leave the premises, and go to reside in the country until the excitement blew over. It was at this juncture that my assistance was requested by the head of the establishment, whom I had long known, and for whom I entertained the highest respect. It is right that I should here mention that the brother-in-law was accused of having diseased both children; but, so far as the young one was concerned, the only evidence was the disease under which she laboured, for she was too young to be questioned.

I immediately summoned to my aid one or two Medical friends conversant with the diseases of children. We examined the child in the presence of the mother. She exhibited no marks of violence whatever, but laboured under mild leucorrhœa. Like all children who have been well tutored,

and have got off a story, she was at first a very good witness, answering "Yes," or "No," to most questions put to her by my friend Dr. Churchill. Presently she got confident, and, consequently more communicative, and then gave some marvellous details with respect to the frequency of the act, and wound up by informing us that it occurred more than once in the presence of her sister—the man's wife! So much for the child. Had she been asked the most preposterous question in the world she would have answered in the affirmative. But then, the parent, an affectionate, motherly, modest woman informed these three or four Medical men present on the occasion, that finding the great difficulty she had to make her innocent little child understand what she was talking about, she had to go into details which are here quite too disgusting for me to relate,—I fervently trust that poor child has long ere this forgotten all about them. No one could accuse the mother of attempting to demoralise her child; she had to resort to these details to break down truth in order to uphold popular prejudice and Medical ignorance.

Eventually Dr. Beatty, a well-known authority upon matters of this description, was brought to see the child, and, as the result of the evidence of that gentleman, and Drs. Churchill, Hardy, and myself, the principal of the establishment and the family (all but the student), if not convinced, at least tacitly agreed to the innocence of the accused; and the family Medical man, to whom I have already alluded, with an honesty and grace which did him honour, acknowledged his mistake; and the man and his wife were brought back.

I hope, Mr. Editor, that I shall never again have occasion to trouble you with the insertion of cases of infantile leucorrhœa leading to false accusations.

ON THE VAPOUR OF AMYLENE.

By JOHN SNOW, M.D.

WE are indebted for the agents which have hitherto been inhaled for the prevention of pain rather to a number of accidental circumstances, than to any systematic and well-regulated investigation. In the course of his experiments on nitrous oxide gas, Sir Humphrey Davy found that severe pain arising from inflammation of his gums was relieved by breathing it, and he published the following opinion in the first year of the present century:—"As nitrous oxide in its extensive operation seems capable of destroying physical pain, it may, probably, be used with advantage during surgical operations in which no great effusion of blood takes place" (a). This sentence was read by hundreds, and listened to at public lectures by thousands, for the period of forty-four years, without any result, when the late Mr. Horace Wells, a dentist of Hartford, Connecticut, being present at a lecture by a Mr. Colston, was induced to request the lecturer to accompany him to his office, and to exhibit the gas to him, while another dentist, named Dr. Riggs, extracted a tooth which was troublesome. The tooth was extracted without pain, and Mr. Wells, after the effect of the gas had subsided, exclaimed, "A new era in tooth-pulling!" Mr. Wells administered the nitrous oxide in thirteen or fourteen cases of tooth-drawing, in Hartford, with a success more or less complete; and before the end of the year he repaired to Boston, to introduce his discovery to the Professors at the Massachusetts General Hospital. For want of a more important operation, the gas was tried in a case of tooth-drawing. The patient felt some pain, and the application was considered to be a failure. Mr. Wells returned to Hartford in disappointment. He expressed his opinion to his friends that nitrous oxide gas was uncertain in its effects, and not to be relied on; and he altogether abandoned the use of it until some time after Dr. Morton's discovery of the effects of sulphuric ether in preventing pain.

Ever since 1818 the vapour of ether had been known to produce exhilarating effects, similar to those of the laughing gas. This circumstance was mentioned in nearly all the standard works on Chemistry; and it was the practice for the Medical Students in many of the Colleges, both in England and America, to inhale ether on the day of the lecture on that medicine. Dr. Morton, a dentist of Boston, had been formerly in partnership with Mr. Horace Wells, and had been

(a) Researches concerning Nitrous Oxide, p. 556.

present at his unsuccessful attempt to apply the nitrous oxide in the Hospital. On September 30, 1846, Dr. Morton administered the vapour of sulphuric ether successfully in a case of tooth-drawing, and shortly afterwards he administered it with success in some Surgical operations in the Massachusetts General Hospital. He thus established the power of sulphuric ether to prevent pain in the very institution where Mr. Horace Wells had failed in his attempt to introduce the nitrous oxide. Dr. Morton had apparently received some information respecting ether from Dr. Charles Jackson, Professor of Chemistry, but to Morton the merit is entirely due of introducing the practice of preventing the pain of Surgical operations. This is certainly true of modern times, and, probably, of all times to which history extends; for I believe that the use of mandrake by the Greeks and Romans, and of Indian hemp by the Chinese, must have been attended only with slight success in Surgical operations. I need hardly remind the Society that the inhalation of ether was soon extended to the prevention of pain in obstetric cases and a number of diseases, as well as in Surgical operations.

A medicine called chloric ether has been in use since 1831. It was first applied by inhalation with success in preventing pain by Mr. Jacob Bell, of London, early in 1847; and it was exhibited afterwards with occasional success in St. Bartholomew's and the Middlesex Hospitals, and in the private practice of Mr. Lawrence. This misnamed chloric ether is a solution of chloroform in spirit, and the insensibility it occasions when inhaled is entirely due to the chloroform, of which it contains about twelve per cent. Mr. Waldie, of Liverpool, being in Edinburgh in the autumn of 1847, explained these circumstances to Dr. Simpson, who had been the first to apply inhalation in the practice of midwifery, and was at the time paying great attention to the subject of anæsthesia. Dr. Simpson procured the chloroform in its undiluted state, and was the first to exhibit it in this condition, and the public and the Profession are indebted to him for its introduction to general use. Chloroform was immediately adopted, to the almost entire exclusion of ether, and has continued to keep its place, with a few exceptions, to the present time. At the Massachusetts General Hospital the use of chloroform was prohibited by the governors three or four years ago, on account of two accidents; and sulphuric ether has since been used, to the entire exclusion of chloroform. Ether is the agent employed in private practice in the town of Boston; and I have been informed that this is the case at Philadelphia, and in Europe, at Naples and Lyons.

Ever since the introduction of chloroform I have been of opinion that other agents would be met with more eligible for causing anæsthesia by inhalation. It seemed improbable that this one, which happened to be standing on the shelf of the Pharmaceutical Chemist for another purpose, should be better than all the very numerous volatile compounds which organic chemistry is daily bringing to light; and the continued use of chloroform is probably due to the circumstance, that hardly any one has made anæsthesia by inhalation a subject of constant and protracted investigation. I have from time to time made experiments on animals with a variety of substances, and I find that the agents which might be inhaled for the prevention of pain, in the absence of others which are more eligible, are extremely numerous. They include, among other things, carbonic acid and carbonic oxide gases, olefiant gas, the vapour of hydrocyanic acid and cyanogen gas, which last is contained, as I found, in the fumes of the puff-ball, which Dr. Richardson brought before the notice of this Society. The agents which I have exhibited as anæsthetics to the human subject, in addition to ether and chloroform, have as yet been but few. They are nitric ether, Dutch liquid, benzin or benzole, a bichloride of carbon, made by decomposing chloroform with chlorine gas, the monochlorinated chloride of ethyle, and amylene, the subject of this paper. Nitric ether was exhibited also by Dr. Simpson, and Dutch liquid by him and Mr. Nunneley. These substances possess no advantage over chloroform, unless it be their slower action, while in other respects they are scarcely so agreeable. With regard to benzin, I discontinued the use of it on account of convulsive tremors which it occasioned in a case of amputation in St. George's Hospital. I found that these tremors are a constant result when its effects reach a certain stage. I administered the chlorinated muriatic ether in twenty surgical operations, in the summer of 1851, chiefly in King's College Hospital. Its sensible and physical properties and

its effects are nearly the same as those of chloroform, but I thought that it might possess some advantage in the circumstance that, being less volatile, while its other properties are the same, it would be less liable to cause accident, even if incautiously used. I was, however, prevented from using it further, owing to the great difficulty of procuring it in a state of purity.

Amylene was discovered and described in 1844 by M. Balard, Professor of Chemistry to the Faculty of Sciences of Paris.^(b) It is made by distilling fusel oil with chloride of zinc. M. Auguste Cahours had given this name five years previously to a product which is isomeric with amylene, and is made in nearly the same manner, but is now termed paramylenes. Amylene itself is a colourless and very mobile liquid, of extremely low specific gravity. M. Balard has not stated the specific gravity in his essay, but I found that of the amylene made for me by Mr. Bullock,^(c) and which is extremely pure, to be 0.659 at 56°. It is very volatile, boiling at 102° Fahr., and the specific gravity of its vapour is 2.45. It is composed of ten atoms carbon, and ten atoms hydrogen, and it bears the same relation to fusel oil, or amylic alcohol, that olefiant gas, or ethylene, bears to common alcohol. It burns with a brilliant white flame. It is soluble in alcohol and ether in all proportions, but is very sparingly soluble in water, being in fact a hundred times less soluble than many substances which are usually said to be insoluble in water. I have not yet been able to determine its solubility so exactly as I could wish, but as nearly as I can ascertain, 100 volumes of water dissolve two volumes of the vapour, at which rate one part of liquid amylene would require 10,220 parts of water for its solution. It has an odour somewhat resembling that of naphtha; some persons think the odour rather agreeable, and others think it somewhat unpleasant; the odour is not so strong or permanent as that of sulphuric ether, and does not remain long in the patients' breath. The vapour of amylene is much less pungent than those of ether and chloroform. It is therefore easier to breathe, and does not cause the choking feeling which sensitive and nervous patients often complain of in breathing chloroform. It has not caused any coughing to signify, except in two patients who were suffering from catarrh, and in these cases the cough subsided in a minute or two.

I was not aware of the existence of amylene till a few months ago, or I should have tried it sooner; for I made inquiry in 1848 for a substance named eupion by Reichenbach, its discoverer, but was unable to obtain it. Eupion is a carbon-hydrogen, described as having all the physical characters which belong to amylene, though obtained in a different way; and I believe it is the same substance. Reichenbach obtained it from coal tar, but other chemists have not been able to make it.

Judging from experiments which I had made on analogous substances, there could be no doubt of amylene causing insensibility when inhaled; but I could not tell, without actual trial, whether it might not be too powerful, or otherwise unpleasant in its action. I made a number of experiments in 1848 (d), from which it appeared that each definite degree of narcotism was occasioned by an amount of the narcotic agent, bearing a certain relation to the whole amount which the blood is capable of dissolving, and that this relation was nearly the same in regard to ether, chloroform, and several allied substances. For instance, a very complete state of insensibility, which I named the fourth degree of narcotism, was caused by the presence in the blood of 1-28th part as much chloroform as it was capable of dissolving; and that the same state of insensibility was also occasioned by 1-28th part as much ether as the serum of the blood was capable of dissolving. The same relative amount of nitric ether produced the same degree of narcotism. In the case of bromoform and of bromide of ethyle, it was 1-27th part, with Dutch liquid it was 1-25th part, and with bisulphuret of carbon it required one part in 31 of what the blood was capable of dissolving, to induce the fourth degree of narcotism. Benzin was the only agent among those which I examined at that time which offered any great deviation from the others in the relative amount of its vapour which was required to be absorbed, in order to induce a definite degree of narcotism. To

(b) *Annales de Chimie et de Physique*, 3me Serie, tom. xii. p. 320.

(c) 15, Hanover-street, Hanover-square.

(d) See *Medical Gazette*, Vol. II., 1848, "On Narcotism by the Inhalation of Vapours."

induce the fourth degree of narcotism by benzin it required 1-17th part as much as the blood is capable of dissolving. Now, benzin bears a great resemblance to amylene, being, like it, a carbo-hydrogen, the composition, however, being different.

The amount of amylene which requires to be absorbed is far greater in relation to the quantity which the blood would dissolve than in the case of benzin. I found, from some experiments which I made on guinea-pigs, mice, and linnets, that to cause the fourth degree of narcotism requires about 1-5th part as much amylene as the blood would absorb, to cause the second degree 1-10th part as much, and to cause the third degree, which is as far as I have carried its effect in the human subject, it requires an intermediate portion, or about 15 per cent. I found, for instance, that to induce the fourth degree of narcotism in a guinea-pig, it required that the air in the jar in which it was enclosed must contain 20 per cent., or a fifth part of its volume of the vapour of amylene. The temperature of the guinea-pig is, however, just that of the boiling point of amylene, when the tension of its vapour balances the weight of the atmosphere; and, consequently, the blood passing through the lungs could not take up, in the above experiment, more than 1-5th as much as the whole quantity which it could dissolve. This is a point capable of direct proof. The entire quantity of amylene which is absorbed during inhalation must, however, be extremely small, owing to its very sparing solubility. Taking the solubility of amylene in watery fluids to be what I have stated above, viz., 1 part in 10,220, and taking the quantity of serum of the blood in the human adult to average 410 fluid ounces, as estimated by Valentin, then the amount of amylene circulating in the body in the third degree of narcotism would be not quite 3 minims. The above calculation of the small quantity absorbed into the blood is confirmed by some other experiments which I made. I introduced 14 minims of it into a bladder with 200 cubic inches of air, and after breathing it backward and forward a few times I became very nearly unconscious, and experienced, in fact, more effect from these 14 minims than from 45 minims breathed to and from a large bladder, holding 670 cubic inches.

Viewed in the light of the small quantity which requires to be absorbed into the system to cause insensibility, amylene is a very powerful agent; but when considered in relation to the quantity which is consumed during inhalation in the ordinary way, it is very far from being powerful. This arises from the great tension and the small solubility of the vapour, in consequence of which it is, with the exception of a small fraction, expelled from the lungs again without being absorbed. In this respect it resembles, to a great extent, the nitrogen gas of the atmosphere, with which the lungs are always four-fifths filled, while the blood contains but a few cubic inches. It takes from three to four fluid drachms of amylene to cause insensibility in the adult, while less than a drachm of chloroform is usually sufficient. The quantity of sulphuric ether required to cause insensibility in the adult is eight to ten fluid drachms, one-half of which is absorbed into the blood. In a protracted operation of half-an-hour or upwards, the quantity of amylene used is greater even than that of sulphuric ether; the small quantity of the former which is absorbed is quickly exhaled again from the lungs, and has to be constantly replaced; while the large amount of sulphuric ether, when once absorbed, takes a much longer time to exhal in the breath. This constitutes some objection to the use of amylene in protracted operations, as it adds to the expense.

[To be continued.]

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

LOSS OF SIGHT FROM CONCUSSION OF THE EYE-BALL—ACTIVE TREATMENT—RECOVERY.

(Under the care of Mr. LAWRENCE.)

(Reported by Mr. CHIPPENDALE, House-Surgeon.)

THE following case affords a good illustration of the advantage derived from active depletory treatment in cases of concussion of the retina, and consequent loss of visual power.

E. N., a stout built man, 55 years of age, by occupation a drover, was brought to the Hospital about seven o'clock in the evening of October 17, having been struck about an hour previously across the face with the thong of a whip. Those who accompanied him stated that he immediately fell down senseless, remaining so for nearly two minutes, and that, on regaining his consciousness, he complained of intense pain in the forehead and eyeballs, and of being totally deprived of sight. The man declared that the lash came in actual contact with the globe of the eye; but, with the exception of a slight abrasion across the bridge of the nose, there was no visible sign of any injury having been received, not even ecchymosis of the conjunctiva.

On examining the state of the pupils both were found to be dilated; the right, however, more than the left. The former was perfectly motionless, its diameter being quite unaffected by the strong glare of the gas lamp; but there was a slight degree of movement perceptible in the latter, although it did not contract as a healthy iris should, but only sluggishly and partially. Loss of vision was complete in the right eye; but the left retained the power of distinguishing light from darkness, although the attempt caused great distress, more especially in the injured organ. The pain, which had somewhat decreased since the first receipt of the injury, was still very severe, and principally circumorbital. As the man, who appeared faint and depressed, refused to come in he was merely ordered, Fetus papaveris, hyd. chlor. gr. ij., jalapa, gr. viij.

He did not apply again at the Surgery until the fourth day after the occurrence of the accident, when he gave the following account of himself:—He had remained in bed for two days, but had been prevented from obtaining any sleep by the severe pain in the right eye, which had remained ever since in total darkness; the intolerance of light in the left eye had greatly subsided, so as to have enabled him to follow his occupation of drover yesterday for several hours. There was no alteration in the condition of the pupil, but a slight degree of vascularity of the sclerotica was apparent. He was again repeatedly urged to come in, and warned of the danger of delay, but obstinately refused, promising, however, to do so on the following day.

Oct. 23.—He was admitted to-day, the fifth from the receipt of the injury. With the exception of an increase of pain, there is no fresh remark to make about the eye. Mr. Lawrence ordered, V. s. ad 3xvij., hyd. chlor. gr. ij., opii, gr. ¼, 6tis.

24th.—He derived much relief from the loss of blood, which made him feel faint. Passed a better night, but has been greatly purged. Pt. pil. c. opii, gr. ¼.

26th.—Can now distinguish the features of those about him with the right eye, and can even read the letters painted on the opposite wall, but with great effort. There is scarcely any pain in the eye.

Nov. 2.—He continues to improve. The right pupil has gradually diminished in size, and is now only a slight degree larger than the left. Is quite free from pain. The gums are affected.

9th.—Has gone on uninterruptedly well up to the present time. There is scarcely any difference in size between the two pupils, but the right iris contracts more sluggishly than the left. He can now read a smaller type with much less effort than last week.

The patient shortly afterwards left the hospital at his own request.

SEPARATION OF SACRO-ILIAC SYNCHONDROSIS FROM DIRECT VIOLENCE—FRACTURE OF PUBIC ARCH—INJURY TO INTESTINE—DEATH.

(Under the care of Mr. LAWRENCE.)

(Reported by Mr. CHIPPENDALE, House-Surgeon.)

G. M., aged 46, was brought to the Hospital on October 18, having been knocked down, a few minutes previously, by a cart, which had been overturned by coming into collision, while proceeding at a rapid pace, with one of much greater weight and almost stationary at the time. The cart was thrown upon the pavement, striking the man from behind, and crushing him against the wall. On admission he complained of great pain in the loins, more especially on the left side, and of numbness and inability to move the left leg. When placed in bed a want of symmetry was observed on the two sides of the pelvis, the left ilium appeared higher than the right, and there was considerable shortening of the left

leg, and slight eversion of the foot; but, on measurement, this shortening was found to be more apparent than real, and to be owing to the distortion of the pelvis, the head of the femur rotating freely in its socket.

On placing the hands upon the spines of the ilia, and making but a moderate degree of pressure, crepitus was most distinctly felt by the patient, and by myself, and heard by those around. It was principally referred to the situation of the sacro-iliac synchondrosis, and in a minor degree to the symphysis of the pubes. On tracing the crest of the left ilium some irregularity of outline was perceptible about the posterior third, and crepitus, as if the bone were comminuted at that point. Several ribs on the right side were likewise found to be broken, but there was no contusion, nor any other external sign of injury. He had a great desire to pass water, but was unable to do so. A catheter was at once introduced; the urine drawn off was quite clear, and free from blood.

A rib bandage was merely applied, and a full dose of opium given. For several days it was necessary to give this drug freely, to allay the severe pain, and to combat a tendency to delirium tremens, which at one time appeared imminent. The paralysis of the left leg continued only two days, but for more than a week it was necessary to introduce the catheter twice a-day. The paralysis of the bladder was succeeded by the opposite condition, of great irritability, attended by a constant desire to pass water, which was turbid with mucus. This was quickly relieved by—Enema amyli, ʒij., tinct. opii, ʒj., omni nocte; inf. buchu, ʒij., tinct. hyoscy. ʒss. 6tis.

November 4.—He is now beginning to look very haggard and emaciated, and his appetite has become very indifferent. He complains only of constant pain in the loins. Is able to move his left leg about freely, and has even been sitting upright in bed several times. Has quite lost that irritability about his bladder, and can now retain his water for several hours. Up to the present date he has had perfect control over the sphincter ani, but now there is incontinence of feces; he is aware of their passage, but is incapable of making the slightest effort to restrain them. A large bed-sore has formed over the right side of the sacrum. Hst. quinae dis. gr. ij., ter die; mutton chop, 2 eggs, gin ʒvj.

10th.—An abscess that had formed over the seat of injury was to-day opened, and nearly a pint of healthy matter evacuated, which evidently came from the interior of the pelvis, as from the external appearance of the abscess it was not inferred that it contained so much. There was no fecal odour. On the fourth morning after the opening of the abscess, the bed was found saturated with blood. When the coagula were removed from the wound, the nature of the injury was at once apparent; the rough edge of the ilium was seen to be separated from, and overhanging the sacrum, and the posterior spine was felt to be comminuted. The blood, which was principally venous, appeared to issue from beneath the edge of the bone. The wound was plugged with lint, and a compress applied, and the man placed on the uninjured side, supported by pillows, a position which he declared to be comfortable.

The compress, however, was not found to restrain the hæmorrhage; it was, therefore, removed, and another attempt made to discover its source, but with no better success. Acidi gallici, gr. x. 4tis horis.

15th.—The discharge to-day has become most offensive, and of a decidedly fecal odour. Some gas also escapes. As there was evidently a communication with the intestine, no further pressure was made, but a poultice merely applied. Later in the evening, a large quantity of fecal matter escaped through the wound. He died the following day.

Post-mortem examination.—On enlarging the abscess-wound in the left loin, the ilium was found to be separated from and overlapping the sacrum to the extent of three-quarters of an inch in the direction upwards and backwards, the separation having taken place through the sacro-iliac synchondrosis; the posterior 5th of the crest of the ilium was also fractured into several pieces. The horizontal rami of both pubic bones were broken, their periosteal covering for some distance being undermined by unhealthy suppuration. On the right side there was also another comminuted fracture about the junction of the rami of the pubes and ischium. No attempt at reparation was apparent at either seat of fracture. The peritonæum lining the inside of the pelvis and the viscera contained in its cavity was of a dark slate colour, the muscles and cellular tissue were of the same hue, and were infiltrated

with unhealthy pus, which had passed along the sheath of the psoas, and pointed on the inner side of the right thigh. The bladder was perfectly healthy. The descending colon was adherent to the margin of the wound; no extravasation had taken place into the abdominal cavity, but there was a communication with the abscess through a small circular opening. On the right side eight ribs were found to be broken; some of them comminuted, but the pleura was uninjured.

ST. MARY'S HOSPITAL.

SEVERE BLOW ON THE HEAD—SYMPTOMS SUGGESTIVE OF FRACTURE OF THE BASE OF THE SKULL—SLOW RECOVERY.

(Under the care of Mr. COULSON.)

James West, aged 64, labourer, admitted into St. Mary's Hospital, May 1st, 1856, 7 p.m., under Mr. Coulson. About three hours since, while employed in cutting timber, a large bough fell from a height upon the side of his head, which knocked him down and stunned him. This happened fifteen miles away, and he was brought here in a cart directly after the accident.

He was at first quiet, and did not move in the least, but in coming along he was sick, after which he became restless and muttered frequently. When admitted he was in a state of partial collapse, bathed in a cold perspiration, bleeding from the nose and left ear, occasionally muttering incoherently, and tossing his limbs about. When spoken to he gave no evidence of understanding what was said, but moved his head away. His pulse was small and quick, the breathing was short and rapid, over the left temporal bone was a scalp-wound about two inches in length, but the bone itself was not exposed. Both the eyelids were much discoloured and distended with blood, so as to close them completely, and there was much ecchymosis beneath the conjunctivæ, more especially on the left side; both pupils were contracted, the right one sensible to light, the left not so. The mouth was filled with blood, but this appeared to come from the nose; there was movement and feeling in all the limbs.

His head was shaved, and a cold evaporating lotion kept constantly applied. When he had quite recovered from the collapse, five grains of calomel were given, to be followed by senna mixture.

May 2nd.—He was quiet through the night, sleeping most of the time, and became sensible towards morning. He gave a very distinct account of the accident, but remembers nothing since. There was scarcely any bleeding from the ear during the night, and it is now quite stopped. He complains of intense headache, particularly across the temples. The left side of the face is paralyzed, and his tongue when protruded points to the right; both eyelids are fully distended with blood, so that he cannot open them; when raised by the finger he can see clearly with the right eye, but not at all with the left; on this side the eyeball is very prominent, and he cannot move it in the least; the pupil is contracted and insensible to light, he has no feeling in the conjunctiva, and can bear firm pressure upon it without being aware that it is touched; can hear as well as ever with both ears. Has not been sick since his admission; his bowels have acted very freely; has a full, strong pulse, with a hot skin, and a dry tongue. He was ordered two grains of calomel, night and morning, with magn. sulph., ʒss.; mist. ammon. acet., ʒj.; 4tis horis. Under this treatment the feverish symptoms abated, though the pulse continued quick and hard; but there was no further alteration in him till the 7th, when he could just distinguish light from darkness with his left eye, the loss of motion and sensibility continuing in the globe, which is still very prominent; the swelling of the lids is great, with complete ptosis on the left side.

12th.—There is slight sensation of the parts in the left orbit when touched, but no motion yet; the ecchymosis beneath the conjunctivæ and in the eyelids is beginning to pass away; has headache, but not so severe as it was.

18th.—The paralysis of the face is complete, sensation not affected; has aching pain in the left eye; can rotate the globe to-day very slightly upwards and outwards.

22nd.—Can now use both the oblique muscles, but none of the recti; the left lids are still much discoloured and closed

the vessels of the conjunctiva are much congested; though the eyeball is less prominent, it is unusually sensitive to touch and aches severely. The pulse is quick and hard, 100 per minute. *Fiat fomiculum, temp. sinist.*

27th.—He has distressing headaches the last day or two, and the congestion of the conjunctiva and the pain in the eyeball are much increased. His gums are slightly touched by the calomel, and he has a mercurial factor. *Omit. hydrarg. chloridum. Pt. in mist.*

June 2.—Is beginning to use the recti muscles, and can raise the upper eyelid slightly, but there is projection of the eyeball yet; pain in the head great; cannot lie on his left side, as it causes sharp, darting pain across the forehead, accompanied by giddiness when he rests this side of his head upon the pillow. His pulse varies nearly every day, from 90 to 110 per minute. He was allowed some fish for dinner for a day or two; this has caused the pulse to rise to 120 or 130 per minute, so it was discontinued. *Cont. mist. ter die.*

5th.—The issue discharges copiously, but the slough has not yet separated. Has much pain at times still in the head; complains of the skin feeling very sore, as if bruised, over the left side of the forehead; has had cramps, with extreme coldness in his limbs, for the past two or three days. He can now move the eyeball fairly; the pupil remains permanently contracted, he has no further vision. Pulse quick and very weak. A drop of solution of atropine is to be put in the eye daily.

8th.—This morning hæmorrhage suddenly took place from a large branch of the temporal artery, which was opened by the separation of the slough of the issue; it was readily controlled by a compress, but he lost from six to eight ounces of blood.

9th.—Has had no further bleeding. The pupil is dilated by the atropine. Suffers much from throbbing and aching in the orbit. *Collyrium belladonna et opio; oculo appl. sæpe.*

17th.—He is exceedingly weak and low; has constant and severe headaches. Conjunctiva exceedingly congested.

Pil. hyd. chlor. co. gr. v. o. n.

20th.—Can move the eye well now, but is unable to raise the lid more than half, yet neither will they completely close, fully half-an-inch being left between them, so that the pupil, though turned upwards, can be seen. Vessels of conjunctiva very full and tortuous. They were scarified, and the following lotion applied:—

Arg. nitratis, gr. iij., aquæ destillatæ ʒj. Solve; pone gutt. ij. in oculo sinistro, bis die. Omit. sol. atropiæ.

July 7.—The above treatment relieved the congestion. Pupil is again contracted. His head is better than it has yet been since admission. Bowels act regularly once a-day.

11th.—Has scarce any feeling in the skin now over left side of forehead; face is less distorted than it was; tongue protruded straight; is rather deaf with the left ear; the pains across temples and in the eye have returned.

Empl. lyttæ, 2 × 2 in.; temp. sinistro.

20th.—Can only tell light from dark when the sun shines strongly in the ward. Pains in head continue severe. A seton at the back of the neck.

August 11.—Has lost all sight in the left eye, and the deafness on the same side is increased—in other respects has improved. For the last two months a daily record of his pulse has been kept; it has varied from 20 to 30 beats per minute from day to day, sometimes without any assignable cause. To-day it is 82, which is the lowest of all. On July 24 it was the highest, 124. Lately it has been more regular, and not quite so frequent—about 90. Was allowed some meat to-day.

September 1.—Is quite blind with the left eye. Pupil remains contracted and insensible to light. Conjunctiva continues a good deal congested; can only half raise the upper lid, but closes them sufficiently to hide the pupil; has no sensation over the left temple at all usually, but at times it is painful to touch; has occasionally aching in the globe, but less than there was. Complains of severe darting pain across his head at times still, caused and increased by noise or excitement; a loud noise is intolerable when continued; he cannot then hold his head up, as it causes vertigo. Is still unable to rest the left side of his head upon the pillow, as it induces the same peculiar sensations described above. His mouth is drawn a little to the right side; this is increased much when he talks. There is not the slightest movement of the muscles on the left side of the face, which is quite expressionless. A few nights ago he had a slight fit, was first taken with giddiness, then became unconscious,

and his face congested, with cramps and coldness of the extremities; it soon passed off, but left him very unwell for two or three days. It came on at night after he had been in bed some hours, and he cannot ascribe it to any cause unless it be to getting up for a short time, which he had been allowed to do for a few days previous to this attack.

From the issue of the last report to the present, Dec. 1st, he has slowly but gradually improved. His condition now is the following:—He has become rather stout, but is weak and unable to exert himself much. A long continuance in the upright posture causes giddiness, so that he is obliged to lie down. He has never been unconscious since the night he had the fit, nor has he had any return of them. He has not yet been allowed to go out of doors, though very anxious to do so. He suffers but little with headaches, though a loud repeated noise still produces them, and has the same effect upon it as formerly, but not so quickly or so strongly; at times he is very drowsy, and then has severe shooting pain across the temples; can lie now with his head resting upon its left side without any inconvenience; has not experienced the snapping sound for two months nearly; has not had cramps or coldness of the extremities since last report; his mouth is still a little drawn to the right when the face is at rest—markedly so when he talks or gets excited; the muscles supplied by the left portio dura remain paralysed, so that this side of the face is quite expressionless; there is no motor power in the buccinator muscle either. The skin is quite insensible to touch over the left temple; from the middle of the eyebrow to about an inch beyond the external angular process of the frontal bone, nearer to the median line, sensation is impaired, the skin feels numb, with an occasional tingling and pricking; sometimes this feels sore and tender, when he has pain in the eyeball; at other times, it is senseless. There is slight dropping of the upper eyelid, and he is unable to elevate it completely; can nearly close the lids, but the sclerotic still shows between them; can move this eyeball as freely as the other now; has not the slightest vision; the pupil remains permanently contracted; the vessels of the conjunctiva tortuous and a little congested,—this is increased when he has pain in the eyeball, which is sometimes the case; then the sensibility of the conjunctiva is considerable, but at others it does not perceive when the finger touches it till sufficient pressure be made to influence the deeper structures; he protrudes his tongue quite straight; has very nearly lost the sense of hearing on the left side. His pulse is weak—about 90, accelerated quickly and considerably by trifling causes. Since August 11th it has varied frequently up to 120; on Sept. 20th it was the lowest it has ever been since admission, it was then 79; it is more regular than it was, about 85-95 usually. His bowels act regularly, and he sleeps well, has a good appetite, is allowed meat and a pint of beer daily; his memory is not impaired, nor does his brain appear to be in any way affected.

HOSPITAL NOTES.

RECURRENT FIBROID TUMOUR IN THE THIGH, TWICE EXCISED WITHIN FIVE MONTHS.—CAN RECURRENT FIBROIDS BE DIAGNOSED BY THE MICROSCOPE?—Another illustration of that peculiar class of tumours known as the recurrent fibroids is, now under Mr. Cock's care in Guy's Hospital. The patient is a pale, thin woman, aged 39. On July 1, 1856, a fibrous tumour, the size of a small fist, was excised from the subcutaneous tissue of the front of the left thigh, about two hands breadths above the knee. It had existed for five years, but latterly had increased more rapidly. It was quite movable, and encapsuled in cellular tissue. Mr. Cock stated that its section showed nothing to excite a suspicion that it was other than an ordinary fibrous tumour. Within a few weeks of the operation, however, the wound having meanwhile soundly healed, an induration formed beneath the cicatrix, and very rapidly increased. On December 2 a second excision was performed, an ulcerated mass the size of two fists, having formed. Its base was now found to be intimately connected with the muscles and fascia. Its characters to the naked eye were those of a recurrent fibroid, in which class the case must undoubtedly be placed. When a tumour of this class has

returned once there is no difficulty in recognising its nature; its structure, its return in exactly the same place from which it had been removed, the absence of cachexia or of gland disease, sufficiently mark its distinction from cancer. From fibrous tumours, on the other hand, the fact of return and its microscopic structure will distinguish it. But the important desideratum remains, as to whether there are any characters, either ostensible or discoverable by aid of the microscope, by which the surgeon might identify the original growth, and apprise his patient of its probable sequences. In a great majority of instances the original tumours in these cases have been taken for ordinary fibrous ones, and consequently not submitted to any very minute inspection. Dr. Andrew Clarke has made the observation, that they often show in the interstices of their fibrous structure great numbers of nuclei in process of development by scission, but this character we have reason to suspect is by no means always to be relied upon. In the recurrent tumours the numerous small oat or awn-shaped cells, and the comparative absence of developed fibrous tissue, distinguish them sufficiently; but do these characters exist in the original one? Very often we believe the first tumour much more closely resembles a fibrous one than do any of the subsequent ones. These latter have grown much more rapidly, and consist, as might from that circumstance be assumed, more largely of cell elements; thus, in Mr. Cook's case above, the first growth had occupied five years in arriving at the size of a fist, the second grew to twice that size in as many months. The recurrent tumours, according to our observation, are usually much softer in structure than was the first.

TUMOURS CONNECTED WITH BONE OF DIFFICULT DIAGNOSIS.—Mr. Birkett has now under his care in Guy's Hospital two extremely interesting cases in which tumours are connected with the bones of the leg, in one the tibia, and in the other the fibula, in each being of most difficult diagnosis. In the one a widow, aged 45, was admitted last July, on account of a hard swelling, apparently connected with the head of the left fibula. It was extremely painful, and especially so at nights. It was nodular externally, and the size of a goose-egg. Most who saw the case strongly suspected the malignant nature of the disease, and some even advised amputation of the limb. Mr. Birkett, however, declined to adopt the latter measure without having been able to form a more positive diagnosis. There were some suspicious scars in the pharynx, and, although the woman gave a positive denial as to her having ever had syphilis, and there did not appear to have been any corroborative phenomena, yet it was deemed well to try the iodide of potassium. Only a short trial was made, and no material benefit ensued. The swelling enlarged greatly, and adjacent to it large indurations formed in the subcutaneous cellular tissue. The swelling, which is now diffused, adherent in all parts to the skin and very great, has recently inflamed in several parts and suppurated. The edges of the resulting ulcers are of very suspicious appearance, and during the last six weeks the woman has again suffered from sore throat. Mr. Birkett now entertains a strong opinion that the induration is inflammatory, and not connected with malignant disease. The second case is, in some of its characters, not altogether dissimilar. In it a married woman (suckling), without any history of syphilis, has a diffused swelling, which is the seat of much pain over the upper part of the tibia. In it also the question between malignancy and syphilis has been raised, and is not as yet set at rest.

MELANOSIS IN THE SKIN OF THE TOE EXCISED THREE YEARS AGO.—**MELANOTIC DISEASE OF THE FEMORAL GLANDS.**—It is sometimes interesting to observe the small tendency of melanosis to reproduce itself in the original site from which it has been excised, and to contrast it with the almost certainty of its re-appearance elsewhere. We have seen several cases, almost exact counterparts of the following, which was operated on by Mr. Fergusson on Saturday last. Three years ago the patient, a very robust countryman, had a small, black tumour removed from between the toes, the operator being Professor Lizars, of Edinburgh. He presented himself a month ago with a large mass of glands in the upper third of the thigh, undoubtedly melanotic. He thought his toe had remained well, but on inspecting it a small patch in which black matter was deposited under the cuticle was found. It had showed no tendency whatever to increase. Mr. Fergusson removed the glands, which presented a typical specimen of the disease.

NOTES AND QUERIES.

We that questioneth much shall learn much.—*Bacon.*

No. 173.—CAPONS.

Can any of your readers inform me how the operation of castration in cocks is performed? I have never seen a capon in this country, but in China they are very plentiful, and attain a very large size. I should like to try the experiment.

I am, &c. A COUNTRY PRACTITIONER.

No. 174.—ALPACA WOOL SORTERS.

In looking over some Assurance papers to-day I found a statement that a person died suddenly from the effects of inhaling the dust arising from alpaca wool during sorting; and that fifteen persons have died from this cause in one establishment during twelve months, none being ill more than fifty-six or sixty hours. Can any of your readers give us more information on this subject?

I am, &c.

January 12, 1857.

AN ASSURANCE OFFICER.

No. 175.—DROPSY.

Oct. 23.—Died, Mrs. Julia Syles, wife of John Syles, of Blackstone, of dropsy, from which she had suffered five years. During that period she had been tapped upwards of 140 times, and more than 3000 pounds of water were extracted.—

Gentleman's Magazine, Jan. 1857.

No. 176.—AN IRISH GIANT.

Lately, at Connemara, aged 70, Shawn Nabontree, one of the last of the mythical line of "Irish giants." He owed his *sobriquet* to his unusual stature, being a man of extraordinary athletic symmetry, namely, 7 feet in height, and weighing over 20 stone. His family, the Joyees, have been for many years one of the wonders of Connemara. He has left four stalwart sons.—*Ibid.*

No. 177.—MERRY ANDREW.

The term "Merry Andrew" is said to have been derived from the title given to Andrew Borbe, a Physician, who was born at Pevensey, Sussex, about the year 1500. He styled himself "Andreas Perforatus." He was educated at Oxford, settled first at Pevensey, then at Winchester, and, lastly, in London, where he became Physician to Henry VIII. He was witty, fond of everything that promoted merriment and jocularly, published small works on light subjects, and, although a Court Physician, descended so low as to become a mountebank at fairs. In 1549 he died an insolvent in the Fleet Prison.

No. 178.—ADVERTISING DOCTORS.

The following advertisement from the "Postman" of Jan. 16, 1700, may show what straits physicians and graduates of Oxford might be driven to 150 years ago.

"At the Angel and Crown, in Basing-lane, near Bow-lane, lives J. Piekey, a graduate in the University of Oxford, and of many years standing in the College of Physicians, London, where all sick people that come to him may have for 6d. a faithful account of their diseases, and plain directions for diet, and other things they can prepare themselves; and such as have occasion for medicines may have them of him, at reasonable rates, without paying anything for advice; and he will visit any sick person in London and the liberties thereof, in the day-time for 2s. 6d., and any where else within the bills of mortality for 5s. And if he be called for any person as he passes by, in any of these places, he will require only 1s. for his advice."

I am, &c.

Jan. 10.

R. W. T.

No. 179.—"AT A PRIVATE HEALING."

These words seem to puzzle the writer of the Life of Wiseman, in one of your December numbers. He does not seem to be aware that the words "at a healing" refer to one of the occasions in which the Sovereigns of England periodically "touched for the evil," as it was called. At these ceremonies it was the duty of the King's Surgeon to attend, and lead away the sick person after having received the Royal touch. Queen Ann was the last sovereign who exercised this disputed prerogative of the descendants of St. Edward; and I recollect that when I was a boy there was in Wimborne Minster an old Prayer-book of that queen's reign, containing the "Office for the Healing." For further particulars refer to Maskell's Monumental Ritualia Ecclesiae Anglicanae.

I am, &c.

R. DRUITT.

No. 180.—VACCINATING DOGS TO PREVENT DISTEMPER.

In a letter from the late Wm. Honeywood, Esq., M.P., to Dr. Elliotson, (published by that gentleman in your number for January 3rd) the following *striking* remark occurs: "During this period of seven years, since I first thought of vaccinating the puppies, *not a single hound has run mad.*" Is this statement a fact? and further, if true, is it corroborated by the statistics of rabies in the human species? Should vaccination prove a preventive to this dire disease in man, how infinitely greater its value than heretofore supposed, and how far greater a benefactor to his species the late Dr. Jenner will turn out to have been, than even his most ardent admirers have fancied! Can any of your readers state whether they have ever known "*Rabies*" to occur in a person vaccinated? One answer in the affirmative will set the matter at rest. Probably no observation has been made upon the point. What an interesting subject for investigation! and how it puts the "Puppy" question in the shade!

I am, &c.

Colchester, Jan. 10, 1857. SAMUEL ADOLPHUS PHILBRID.

No. 181.

In vaccinating puppies, will those who have been writing on the subject inform me the best place to do it, and if the matter should be from a child's arm; as I vaccinated a puppy a few days ago inside the ear from a child's arm without any effect?

I am, &c.

A COUNTRY PRACTITIONER.

ANSWERS.

No. 153.—DOG-LATIN.

The origin of the term "*Dog-Latin*" was noted a few weeks ago in this Journal. Dr. Caius, the well-known founder of a College at Cambridge, wrote a work entitled, "*De Canibus Britannicis.*" Did the slang-loving undergraduates of the day consider the doctor's Latin sufficiently characteristic to deserve the above term?

I am, &c.

ALFRED HAVILAND.

No. 166.—DR. JAMES SIMS.

The following account of Dr. Sims, from Wadd's *Nugæ Canoræ*, may be useful to "*Curiosity*":—

"Here lie in repose,
The visage and nose
Of James Sims, from the Lake of Killarney:
Had I deem'd it my duty
To call him a beauty,
You'd have thought I was dealing in blarney!"

Dr. Sims was a son of the Emerald Isle, a man of learning and great good humour, but strangely tinctured with vanity about his person, which he thought irresistible. He used to attend Kensington Gardens and other places of fashionable resort, but without making any conquest, and it was not till late in life that he succeeded in obtaining the hand of a young and fair lady, who, strange to say, was not *blind*, but deaf!

Wadd, in his *Nugæ Chirurgicæ* says, "He was a good-humoured, pleasant man, full of anecdote; an ample reservoir of good things; and for figures and facts a perfect chronicle." And so he was; and much do I wish he could have heard Dr. Babington—who, by the by, is one of the cleverest doctors living—telling with peculiar felicity some excellent Irishisms, particularly that of a countryman of his for whom he had prescribed an emetic, who said with great naïveté, "My dear Doctor, it is of no use your giving me an emetic; I tried it twice in Dublin, and it would not stay on my stomach either time."

I am, &c.

Pall Mall, Jan. 12.

M. R. I.

No. 172.—SCHOOLS OF SALERNO AND MONTPELLIER.

There are short accounts of the School of Salerno in the "*Dictionnaire des Sciences Médicales*," in Rees' "*Cyclopædia*," and in the "*Encyclopædia Metropolitana*."

Concerning the School of Montpellier, see Astruc's "*Mémoires pour servir à l'Histoire de la Faculté de Médecine de Montpellier*," revus par Lorry, 4to, 1767; Riolan (fils): "*Recherches sur les Ecoles de Paris et Montpellier*," 12mo, 1651; F. Bérard: "*Doctrine Médicale de l'Ecole de Montpellier*," 1819; and Cross's "*Medical Schools of Paris and Montpellier*," of which Eusèbe de St. Salle published a French translation.

I am, &c.

J. C.

No. 172.

Refer to The History of Medicine, Surgery and Anatomy, by Wm. Hamilton, M.B. London: Henry Colburn, and Richard Bentley, 1831, 2 vols. 8vo., p. 314 et seq.

I am, &c.

R. W. F., M.D.

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Medical Times & Gazette.

SATURDAY, JANUARY 17.

POISONING BY STRYCHNIA.

WE alluded last week to a case of alleged poisoning by strychnia which has lately occurred, and the details of which have gone the round of the public journals. From the published accounts it was made to appear that the case in question presented some features of strychnia poisoning of an unusual and peculiar kind; and so much attention has been drawn to the subject, that we think it necessary for the interests of science to review the whole of the evidence, so far as it has transpired, and to draw such conclusions as the very imperfect nature of the recorded facts will allow.

This case was the subject of an inquest, and the main points proved in evidence appear to have been as follow:—

1. The deceased, a female servant, aged 37, was found lying dead on the kitchen floor, in an easy and recumbent position, the hands being closed by convulsive action of the fingers.

2. She had been seen alive and well at four o'clock, and was found dead at a quarter before six o'clock in the afternoon.

3. When found there was no *rigor mortis*, except a strong muscular convulsive action in the fingers; the state of the feet is not described, nor is it reported whether the body was warm or cold. We can only presume that it was not cold, as two hours had not elapsed since the deceased had been seen alive.

4. A bottle, marked "poison," was found in her box, containing a mixture of strychnia and French chalk, in what proportions it is not stated.

5. The medical man who made the post-mortem examination and analysis gave an opinion that the deceased had died from strychnia, and that she had taken some twelve or fifteen grains of the poison. There is an entire want of evidence to show on what this conclusion respecting the dose was based.

6. The jury returned a verdict of "suicide."

So far the case appears to be one of those which, but for the discovery of poison in the deceased's box and the suspicions thereby excited, might have been overlooked.

In summing up the evidence the Coroner is reported to have described the case as an exceedingly important and extraordinary one. "It might be remembered that a short time since it was generally presumed that poisoning by strychnia resulted in violent contortions of the hands, and convulsions, but here was a case that exploded the whole theory."

Inquiries having been addressed to us from various quarters on the peculiar features of this case, we have to remark that in our view, as the facts are reported, it presents nothing very remarkable, or conflicting with past experience on the action of strychnia.

That strychnia produces convulsions and contortions of the limbs and trunk in a *living* person who has swallowed the poison, is abundantly proved by experience, and is not a conclusion derived from any theory. The three cases of Agnes French, Mrs. Dove, and Mrs. Sergison Smyth, of which the facts were given in evidence on the trial of Palmer, show that these are the common effects of strychnia; and, further, that an unusual degree of rigidity may or may not follow death. The bodies of man and of the lower animals poisoned by strychnia are generally flaccid at the time of death, and from the attitude of the dead body at this time, it would be impossible to form an opinion whether the deceased had or had not suffered from convulsions. This would be a matter of conjecture, as during life there are generally intervals of greater or less perfect relaxation between the paroxysms of convulsions. Death may take place, and has been observed to take place quietly during an interval of this kind, apparently from pure exhaustion.

The body of a person killed by strychnia does not necessarily retain in death an attitude indicative of violent contortion or convulsion. In some instances, where death may have taken place rapidly in the fit, an unnatural attitude may be met with; but in the majority of instances this is not the case.

As to the occurrence of *rigor mortis* in cases of poisoning by strychnia, this appears to be subject to great variation in its period of commencement, its intensity, and its duration. In some cases it has been strong and well marked; in others it has not attracted particular notice. In Mrs. Dove's case it was described by one of the witnesses as not greater than usual; while in Mrs. Sergison Smyth's case, the limbs were described as remarkably stiff when the body was warm; and this stiffness continued more or less for three days. Both of these were undoubted instances of poisoning by strychnia, and yet they presented this difference. It will, therefore, be perceived that the female upon whose case we are commenting may have had the usual convulsions caused by strychnia, and yet no other sign of the existence of these convulsions may have remained in the body at the time of death than the strong muscular contraction of the fingers. Further, the comparative slightness of the *rigor mortis* in the body, when seen while recently dead, in the absence of any detailed description of its condition when quite cold, is not inconsistent with what is accurately known respecting poisoning by strychnia. The fact that the deceased wilfully took the poison with the intention of destroying herself may have restrained her from crying out during the paroxysms; or, for anything that appears to the contrary in the report, her cries, if she made any, may not have been heard. The case loses its medico-legal interest in the fact that there was *no one present to witness and describe the symptoms*. We do not perceive, therefore, that any theory is exploded by its occurrence. There may be varieties in the action of strychnia which we have not yet observed; but we can hardly draw this inference in a case in which the deceased was not even seen while labouring under the effects of the poison.

There is another and a very serious point of view, however, in which this inquiry has not attracted the notice of our contemporaries. On what pretence did "Mr. Phillips, Chemist and Druggist, of Haverfordwest," sell twelve or fifteen grains of a deadly drug like strychnia to a domestic servant? How can such conduct be justified? If a servant can thus easily procure this formidable poison, she may easily destroy the lives of a whole family, and thus commit murder in place of suicide.

We trust the public will not be misled by the imperfect mode in which this inquest has been reported in the daily journals. As the report stands, it appears to inculcate the dangerous doctrine that the poison may be used to destroy

life without necessarily producing symptoms in the living, or leaving evidences of its effects in the appearance of the dead body.

But we must repeat our observations made last week, that the case has been either most imperfectly reported, or the evidence has been inconclusive. It is possible that some details have been accidentally omitted, and we again hope that the medical gentleman who attended the inquest will favour the Profession with some more information than has hitherto been supplied.

THE WEEK.

There is a general outcry against ticket-of-leave men, but no one offers any very good suggestion what to do with our convicts, except Drs. Cullen and McDermott, who propose that they should be sent out to clear a line of road across the Isthmus of Darien, and cut a canal through it. If this suggestion were acted upon we should be relieved of some of our dangerous classes, and the convicts would be enabled to expiate their offences by the execution of a great work which would confer a lasting benefit on the world. It is known that the Government of New Grenada have not those objections to the introduction of convicts which have been so usually urged by our colonists in Australia and elsewhere. It has been said that the climate is unhealthy; but Dr. Ross, of the *Virago*, Dr. Brownlow, of the *Cyane*, and Dr. McDermott, report that the popular idea of its unhealthiness is quite erroneous, not a single case of sickness having occurred among any of the parties sent on shore from the *Espiègle*, *Cyane*, and *Chimère*. Indeed, it was remarked by all the Medical Officers, that the crews of the vessels were in better condition on leaving Darien than on arrival there. Dr. McDermott writes to us:—

"From all the inquiries I made among the natives, I could not ascertain that any particular form of fever or other disease prevailed among them, and from their appearance I should say they are a very healthy race."

Mr. Lionel Gisborne, C.E., in a letter to Lord Wharnccliffe, Chairman of the Atlantic and Pacific Company, dated May, 1854, says:—

"There have been altogether in this surveying expedition 900 persons subjected to climatic influences, some along the shore, some in the interior; and I believe I am correct in stating that not a single case of illness occurred during the whole period of our stay."

The opinion of the healthiness of the climate expressed by Dr. Cullen in 1852, in his work on Darien (pp. 83—88), and deduced from the consideration of the physical aspect of the tract of country which he proposed for the line of the canal, has thus been borne out by subsequent experience. This evidence is quite sufficient to answer any objection to the plan of Drs. Cullen and McDermott on the ground of the unhealthiness of the climate; and we trust that this proposition will meet with due consideration, now that our streets are so infested with dangerous criminals.

A case of suspected wife-poisoning is now under investigation, which will strengthen the prevailing feeling in favour of a reform in the present system of conducting the important inquiries into the cause of suspicious deaths. A woman died at Chesham, in Buckinghamshire, and arsenic was found in the stomach by Mr. Dewsnap, of Chesham, and by Professor Taylor, to whom the stomach had been sent for analysis. Dr. Taylor wrote to the Coroner to say that the analysis had been commenced and arsenic detected, but the process required care and time for its completion, and the sum of two guineas the Coroner was enabled to grant was not sufficient remuneration. The inquest has been adjourned to the 19th instant, and Sir George Grey written to on the subject. Sir

George has never hesitated to issue an order for the costs of all analyses when he considers the circumstances sufficient to justify his interference, and the matter will, probably, be arranged satisfactorily; but, as we said before, such important investigations should be conducted on a regular and proper system.

Considerable interest was excited by the paper on "Amylene," read by Dr. Snow at the Medical Society last Saturday. It will be found in full among our Original Communications. It was elicited in the discussion that the after-effects—*as nausea, headache, etc.*—are very slight; that there is no sickness, *as after chloroform*; certainly none of that persistent depression for days which has sometimes followed the use of chloroform. Dr. Priestley thought the smell of amylene would be fatal to it, especially in obstetric practice. Dr. Kidd thought the immunity from sickness might be attributed to the fact that the anæsthesia from amylene was not so perfect as that from chloroform. If the amylene were active enough we should have nausea and vomiting, just as much as when chloroform is used. Dr. Richardson had remarked the pulse to be very much accelerated, and the pupils dilated by amylene, while convulsions were not observed; and that although the patients were not sensible of pain, they were still conscious of what was going on. The great success with which Dr. Snow has employed amylene certainly gives ground for the hope that some substance may be discovered having the power of producing insensibility to pain without affecting the consciousness of the patient.

The *Morning Chronicle* contains an article on the late election of President at the College of Physicians. The following anecdote occurs, referring to the manner an obnoxious president was driven from office. Sir Francis Milman, "finding that all his nominations to office in the College were blackballed by the Fellows, cast from before him the mace, tore from his shoulders his robe, which he flung to the ground, and rushed out of the room, exclaiming 'Depono auctoritatem meam!'" We believe our morning contemporary exaggerates very much any feeling of dissatisfaction which may prevail among the Fellows at the result of the late election, and trust that Dr. Mayo will prove the choice of the Elects to have been a good one, by earnestly assisting to obtain those reforms so anxiously wished for by the great majority of those over whom he presides.

Mr. Griffin, in anticipation of the meeting of Parliament, is taking time by the forelock, and is preparing, for distribution to each member of the House of Peers and of the House of Commons, a statement of the grievances of the Poor-law Medical Officers. This statement appears in the form of a pamphlet, a portion of which has been forwarded to us, and is addressed to Lord Palmerston, who, it is hoped, will be induced, not only to read it, but to devise some remedy for the manifold grievances which are set forth in its pages. We have so often commented upon the hardships to which the Medical Officers of Unions are daily and hourly exposed, that the facts and reasonings in Mr. Griffin's pamphlet will appear to our readers like a thrice-told tale; but to many of the members of the two Houses of Parliament the facts will have, no doubt, an air of novelty, as our Legislators would certainly never have permitted such gross injustice to be perpetuated against the members of our Profession, if the wrongs had been duly represented. Mr. Griffin, in the very able document now before us, has examined the subject of Poor-law grievances in every possible aspect; he has shown the absurd inequality which exists between the rates of payment of

Medical Officers for rendering the same services; he has proved the utter insufficiency of the remuneration in most cases; he has refuted the mean and paltry arguments used, as to the eagerness with which some Medical men seek for appointments to unremunerative offices; he has shown that a great number of the most respectable Medical Officers are continually throwing up their appointments in disgust, and that the attendance upon the sick poor is, consequently too often intrusted to young and inexperienced hands; and that the whole of the present system is insulting to the Medical Profession, and most injurious to the interests of the sick poor. Mr. Griffin, in the name of the Poor-law Medical Officers of England and Wales, asks for redress against the injustice of the Poor-law Board and of the local Boards, at the hands of the British Legislature; he asks for a general increase of the salaries of the Medical Officers, or at least for such a fair adjustment of their emoluments as may be consistent with the average nature of their duties; he urges that drugs and other appliances should be furnished at the expense of the Unions, or that, if the Medical Officer agree to supply them, the latter should be at least paid sufficiently well to cover his expenses; and, what is also of vital importance, he prays that no Medical Officer should be dismissed from any Union or Parish except upon the ground of misconduct. Such are some of the principal topics touched upon in Mr. Griffin's pamphlet; but our space prevents us from following him into his numerous statistics, and the arguments by which he has so abundantly proved his case as to silence opposition; and we can only express our hope that his luminous statement will be carefully perused by all those to whom it is addressed, and that the time is approaching when redress may be expected. But we must most emphatically beg of the Union Surgeons to rally round Mr. Griffin more closely than ever, for now is the time when good effects may be anticipated as the result of the agitation which has been commenced in their behalf.

Elections are going on at Southampton, Greenwich, and Newport, and new writs will be issued for some other places soon after the meeting of Parliament. The lawyers and the army are as usual quite prepared with candidates to represent the interests of their professions in the House of Commons, but we hear nothing of any Medical candidate. We trust our Medical brethren who have any local influence will be well prepared with candidates before the next election, who will cause the voice of the Profession to be heard upon all sanitary questions, and will maintain the just rights of their order in the Legislature. There are many men both able and willing to respond to the call of their Professional brethren. For the sake of the public health and the best interests of medicine, it is to be hoped that our provincial friends will bestir themselves in time.

Among the inquests of the week there is one which calls for a more accurate report than has yet appeared. A child only three months old died rather suddenly. The father had been in the habit of taking acetate of morphia, and is reported to have sworn that he had "used himself to take between 20 and 30 grains at a time." The mother gave the child some of the father's medicine every night to check violent screaming, and went on until the dose amounted to half-a-grain. Mr. Hadaway found softening of the substance of the brain and congestion of its membranes, "the lungs so much *shrunk* that the deceased must have breathed with great difficulty for some time." No traces of morphia could be discerned in the stomach. Mr. Hadaway attributed the death to inanition, and the jury agreed with him.

OUR GREAT ONES OF THE PAST.

JOHN CHEYNE, M.D., F.R.S.E., M.R.I.A.—*Continued from page 43.*

Convinced that nowhere else could we so truly arrive at his motives of action, we have taken the greater part of the foregoing memoir from the autobiographical sketch already alluded to, introducing here and there such remarks as the occasion suggested to us, or such additional information as we have been able to obtain. We shall now quote at length the directions relative to his burial, drawn up by Dr. Cheyne not long before his decease, and appended by the editor to the sketch in question; this we shall do for the purpose of showing that as this great and good man laboured, after his retirement from professional life, to lay before his brethren, for their benefit and guidance, the honourable means he had successfully employed in order to attain to the well-earned eminence he so long enjoyed, so did he desire that after his removal from this life he being dead should yet speak, and point out to those he left behind the way of peace he himself had found.

“DIRECTIONS RELATIVE TO MY BURIAL, ETC.

“My body, attended only by my sons, is to be carried to the grave by six of the villagers, very early on the fourth or fifth morning after my decease. I would have no tolling of bells if it can be avoided. The ringers may have an order for bread to the amount usually given upon such occasions; if they get money they will spend it in the alehouse, and I would have them told that in life or death I would by no means give occasion for sin. My funeral must be as inexpensive as possible; let there be no attempt at a funeral sermon. I would pass away without notice from a world which, with all its pretensions, is empty. ‘Tinnit, inane est.’

“Let not my family mourn for one whose trust is in Jesus. By respectful and tender care of their mother, by mutual affection and by irreproachable conduct, my children will best show their regard for my memory.

“My decease may be announced in the Irish newspapers in the following words—‘Died at Sherington, Newport Pagnel, Bucks, on the day of , Dr. Cheyne, late Physician-General to the Forces in Ireland.’ Not one word more; no panegyric.

“I believe there is a vault belonging to the manor, but if it be under the church, I should not wish my body to be laid in it, but in the churchyard, two or three yards from the wicket which opens from the path through the fields. I pointed out the spot to —, and chose it as a fit place for a rustic monument, without marble or sculpture—a column such as is represented in the accompanying sketch, about seven or eight feet high. On the column, on hard, undecomposing stone, are to be engraven the following texts:—St. John iii. 16, ‘For God so loved the world,’ etc.; St. Matthew xi. 28, 29, 30, ‘Come unto me, all ye that labour,’ etc.; Hebrews xii. 14, ‘Follow peace with all men,’ etc.

“As these texts are meant to rouse the insensible passenger, they must be distinctly seen. The following inscription is to be engraven on the opposite side of the column:—

“Reader, the name, profession, and age of him whose body lies beneath, are of little importance; but it may be of great importance to you to know, that, by the grace of God, he was brought to look to the Lord Jesus as the only Saviour of sinners; and that this ‘looking unto Jesus’ gave peace to his soul.

“Reader! pray to God that you may be instructed in the Gospel; and be assured that God will give his Holy Spirit, the only teacher of true wisdom, to them that ask him.

“If any objection be made to the spot pointed out for the interment of my body, let some other be chosen where the inscription on the column to be erected over me may be seen to advantage. The monument is for the benefit of the living, and not in honour of the dead.

“I wish the inscription to be preserved, and leave this to my children, and my children’s children.”

These directions were scrupulously attended to; and the monument, which marks the spot where Dr. Cheyne lies buried, besides the texts and inscriptions given above, bears only the initials, J. C.

Dr. Cheyne himself has candidly described his early career, and traced for us his progress to the high Professional posi-

tion he occupied until declining health compelled his relinquishment of its responsibilities and its emoluments. The kindness of a lady, often for months together the welcome inmate of his house, enables us to exhibit him in the retirement of domestic life, and from the “reminiscences” she has furnished us with we extract the following:—

“Dr. Cheyne belonged to the Episcopalian Church of Scotland, and I have heard that a sermon, in the Bethesda Chapel in Dublin, was the means of first awakening him to a serious sense of religion; but while this progressed, he had, under a rather cold exterior, so much natural diffidence, so much caution and fear of making too early a profession of his sentiments, lest he should not be able fully and consistently to follow them up, that he shrank from speaking very openly; and it was chiefly in the quiet retirement of his own family that, for a long time, the depth and power of his faith and his heavenly-mindedness could be known. His love for the Scriptures, his reverence for them, his delight in the works of spiritual authors, his distaste for the society of those who could not sympathize with such sentiments, and his love for those, especially young persons, who did relish the freshness and brightness of these heavenly truths, which began to beam upon his own opening path, were very striking and delightful. He had a peculiar pleasure in bringing into his household, as companions, those of differing tastes and attainments, and endeavouring to make them, by contrast, amiably correct and help each other, drawing out, in turn, their various talents; and, by the gentleness and sweetness of Christian domestic intercourse and example, enabling each either to see the other’s excellence or bear the other’s burden. In this he was warmly seconded by his excellent and devoted wife, and by his fair eldest daughter, who died eight or ten years, I think, before Dr. Cheyne left Dublin. To this daughter he was most intensely attached; any increase of the symptoms of her disease used to produce the most affecting impression upon him. He was physically and mentally unable to bear the sight of much suffering in those he loved; he never took leave of, or bid good bye (if he could help it) to any one he cared for; he seemed ashamed to own his intensity of feeling, or to fear his want of power to control it. He had a remarkably clear insight into character, and could give an excellent sketch in a few minutes after the first introduction. This helped him much in dealing with new patients, some of whom I have heard complain that he paid so short a visit and said so little, not knowing that, generally speaking, he read them through at a glance. Those who were admitted to his family circle had the advantage of his physical and psychological training. Dr. Cheyne put them under a course of reading of solid and interesting works, which, when he was not too much fatigued in the evenings, he used himself to read aloud, encouraging conversation and remarks. As he became less able for exertion after the business of the day, the works were read to him, and at a still later period he generally retired to bed soon after tea, and Mrs. Cheyne used to introduce any of the family or young friends, who happened to be staying on a visit, to the privilege of sitting in his apartment and enjoying his society and conversation, always pleasant and profitable, on the subject in hand. Some have said he was morose and melancholy; the latter might have been the case at times, but he loved a merry heart and a cheerful countenance, and could make allowance for the outburst of youthful spirits, even when not just in due season. When his serious and devout character came to be known, he was often consulted by parents for their children, who were beginning to feel that worldly pleasures were wholly unsatisfactory; and yet that, if they gave them up, they knew no substitute to occupy time, and fill the aching void of living without an object. Nervous depression, and other symptoms of physical ailment, often marked this condition of mind. When Dr. Cheyne found such patients earnest and sincere, he used to recommend them to teach in Sunday-schools, and occupy themselves in other works of charity and usefulness; and he professed that he had much fewer patients from the ranks of the overworked philanthropists than from those of the frequenters of the ball-

room, the concert, or the theatre. Many were delighted at his suggestion and encouragement, and Dr. Cheyne became himself the means of introducing such into connexions and religious acquaintances, which made their path at once easy and pleasurable. Some of those who were afterwards among the most useful and devoted, unselfish, and energetic Christian characters in Dublin, owed their first beginnings to Dr. Cheyne's advice and management.

"One more trait I must allude to—his hatred of anything like publicity or ostentation, which he carried to a fault; he was willing to give liberally, but could not be prevailed on to allow his name to appear in print. I think while he felt deeply and truly the force of the precept, 'Let not thy right hand know what thy left hand doeth,' he overlooked another equally important, 'Let your light so shine before men, that they may glorify your Father which is in heaven!' Had Dr. Cheyne suffered his noble deeds to be better known, he would have done more good by his example than by his money."

Dr. Cheyne was a warm admirer of works of art, but he valued them more for the impressions they produced upon his own mind, than for those peculiar qualities for which connoisseurs usually esteem them. Thus the intrinsic value of a picture, or the name of the artist, had but little weight with Dr. Cheyne. His susceptibility to impressions from such works is well illustrated by an anecdote which has been related to us by Dr. Petrie. A picture which he had of Gerard Douw's, representing a philosopher in his study, was, according to his own account, his especial favourite, although it had undergone some injury. This preference was communicated by Dr. Cheyne to Dr. Petrie on the occasion of the latter observing that it was a pity the picture had, to a certain extent, been damaged, and that its marketable value was thereby deteriorated; on which Dr. Cheyne observed, that in his appreciation of pictures he did not take that into account at all; that he esteemed them only in proportion to the useful influence they had upon his own mind, and that in this way the somewhat injured picture by Gerard Douw was to him of inestimable value. "When," he added, "I come in, jaded in mind, and oppressed with painful thoughts, I draw my chair before that picture, and after I have sat for some time in contemplation of the peacefulness and solemn repose it so strongly expresses, I feel a load taken off my mind; I am restored to myself, and I am able to get up and return to my Professional duties."

Dr. Petrie has also acquainted us that there was another picture which was perhaps of still higher value in Dr. Cheyne's appreciation, namely, a portrait of his father, by the great Scottish painter, Raeburn. The important influence of this portrait on his mind he more than once expressed to Dr. Petrie, with the deepest emotion of reverential feeling. Nothing would have induced him to allow its removal from under his eye. Before this picture he felt in his father's presence, and he constantly referred to it as influencing him in all the actions of his daily life, urging him to comport himself in such a manner as would have ensured the approbation of his inestimable and revered parent.

A short article from the pen of Dr. Cheyne, on the subject of a portrait, supposed to be an original likeness of Shakespeare, of whom he was an enthusiastic admirer, was published in the *Dublin Literary Gazette*, 1830, p. 398, and was subsequently reproduced in a separate and enlarged shape by his son, and formed the subject of a controversy in the *Athenæum*.

The friend who has already contributed her reminiscences of Dr. Cheyne's domestic life, bears her testimony to his feelings with regard to his father's portrait in the following words:—"The first oil-painting I ever saw in his house was the portrait of his father, Dr. Cheyne, of Edinburgh, then recently deceased. It affected him very deeply, from the true resemblance. He sat at least an hour contemplating the features with intense and affecting interest, appearing to read in every touch a lineament of one beloved. His soul seemed to enter into the picture, and to realize its identity with the original. I imagined I read his mind and feelings, and while he contemplated the portrait, he was himself my study. After this, which seemed to stamp his soul with singular appreciation of the powers of the artist, he became a frequent visitor of exhibitions and picture-galleries, and, at length, of sales. By degrees he accumulated purchases among some of the

finest specimens of the art; his enjoyment was intellectual, but, by indulgence, became a passion."

As an author Dr. Cheyne's style was pure and classical. His Medical writings exhibit the closest study of nature, and the most diligent observation of the effects of treatment. The articles contributed by him to the "Cyclopædia of Practical Medicine" are on subjects on which he had written during the earlier part of his career, and are enriched with the results of his more matured experience. In addition, he composed for that work an original and valuable Essay upon "Wakefulness," from which distressing affection he suffered so much towards the close of his life. His "Essays on Partial Derangement of the Mind in supposed Connexion with Religion," are designed to show the near affinity which exists between mental and bodily disease, and the necessity of relieving the latter before the former can be removed. "They were produced," observes their editor, "when one of his sons was in the balance between life and death, reduced to that state by the effect of a gunshot wound intended for another, and while he himself was rapidly advancing to the termination he had so long and clearly foreseen."—"Tum demum sanæ mentis oculus cernere incipit, ubi corporis oculus incipit hebescere."

REVIEWS.

On the Origins of the Visual Powers of the Optic Nerve. By JOSEPH SWAN. 4to., pp. 45, with 9 lithographic plates. London, 1856.

IN this work, which is a continuation of the author's *Plates of the Brain*, published in 1853, Mr. Swan does not interfere with the relations of the optic nerves and tractus optici to the tuber cinereum, crura cerebri, corpora geniculata, and corpora quadrigemina. Having announced, in general, that each leading faculty of the nervous system has an especial centre and certain appropriate convolutions in the brain, his present object is to describe what he terms the *true visual tract*, which he represents as a pretty thick fasciculus of white nervous matter, ascending from the anterior angle of the thalamus, by the external side of the corpus callosum, towards one of the convolutions of the cerebrum. He, at the same time, describes two similar cords of white nervous matter, also ascending from the thalamus towards the periphery of the cerebrum, to which he gives the names of the *involuntary tract* and the *sensitive tract*. These three tracts are represented as placed the one behind the other, in the order now mentioned; the *true visual* communicating with the tractus opticus, and, by a slender process, with the mammillary body; the *sensitive* extending from the posterior pyramidal body; while the *involuntary*, which gives rise to the motor root of the fifth nerve, to the glosso-pharyngeal, and to the nervus vagus, is placed between the *true visual* and the *sensitive*. A fourth tract, called the *voluntary*, figured in Mr. Swan's former work on the Brain, and described as formed by the anterior pyramidal body, is only incidentally noticed in the present one. The intermediate parts are occupied chiefly by grey matter.

While we readily admit that the fibres of the thalamus are, doubtless, continuous with some of those which form the white matter of the cerebral hemispheres, we must confess we receive such distinct representations of thick fibrous columns, running up from the thalamus into the medullary substance, and to the very surface of the cerebrum, with no small degree of surprise and incredulity.

The mode of dissection adopted by Mr. Swan, and by which he has satisfied himself of the reality of his discoveries, is, after hardening the brain in alcohol, to remove the grey matter with a couching needle. That, in this way, the portion of the brain manipulated on may be made to assume the shape of columns—such as are represented in Mr. Swan's plates—is conceivable; but that the true connexions of the parts are thus to be discovered is what we very much doubt. Scraping away the grey matter, and so exhibiting long cords of white matter, no more proves a continuity of nervous fasciculi than the external aspect of a rope proves a continuity of the flax fibres of which it consists. The object of the dissector of the brain should be to ascertain the connexion between the fibres of the white matter and the corpuscles of the grey, and not to throw the latter aside, as if they served no other purpose than filling up gaps between the former.

As to Mr. Swan's physiology, while we admit that the central hemispheres are the organic parts in which the impressions made on the organs of sense become perceptible to the mind, and where alone sensations assume a distinct form capable of being recalled by an act of the memory, the proof that the true visual tract is where our author has placed it is quite incomplete. His views on this point are supported neither by comparative anatomy, the history of development, physiological experiment, nor pathological observation; but are, in fact, perfectly arbitrary, and appear to us highly improbable. It is generally acknowledged that the more our inquiries rise towards the highest organs of the cerebro-spinal system, the more difficult it is to indicate anything beyond external form and connexion, or to trace any fitness in the structure we exhibit for the functions which are performed. Mr. Swan seems to feel no difficulties of the sort. The medulla oblongata is generally believed to be the nervous centre, which presides over the movements of deglutition and respiration; but Mr. Swan, with a stroke of his pen and a touch of his couching needle, traces his involuntary tract right on, through or under the thalamus, to the upper surface of the cerebrum. We know that the movements of deglutition and respiration, though in general involuntary and automatic, may be voluntarily performed and variously directed, and in these cases the brain as well as the medulla oblongata must be engaged in the process. This might be urged by Mr. Swan as a ground for his seeking for the seat of a governing power in the brain, over the movements of organs habitually of the involuntary class; but we can discover no evidence that his *involuntary tract* in the cerebrum is actually the part in correspondence with the posterior column of the medulla oblongata. Visual impressions have generally been believed to travel along the optic tract to the corpora quadrigemina, whence, by a path on which anatomists and physiologists have hitherto been unable to condescend, they are transmitted to the sensorium commune; but Mr. Swan appears as if he had a key of his own, which unlocks all the secrets of the brain. Witness the following announcement, the authority for which is just *ipse dixit* :—

“Through the true visual tract the retina is qualified for participating in the highest intellectual and sensorial functions. It conveys sensorial power to the retina, and allows intellectual qualities of objects to be appreciated and accepted by the sensory.”—Page 3.

These sentences afford rather a favourable specimen of Mr. Swan's style, which, in general, is extremely deficient in perspicuity.

Although, generally speaking, all things about the brain seem easy of solution to our author, occasionally he does meet with something puzzling. The partial discussion of the optic nerves in the chiasma is of this kind :—

“It becomes somewhat difficult to understand that one portion of an image received by a single eye should be conveyed to one hemisphere of the brain by the crossing part of the nerve, and another portion of the same image should be taken to the opposite hemisphere by the parts of the nerve which do not cross, and the difficulty is increased when vision is to be completed by one eye, the other being blind. It is rather to be determined that all the origins are, to a certain extent, combined in the same optic tract as in osseous fishes.”—Page 7.

Rather to be determined! Is it rather to be determined that facts are false, than that Mr. Swan's whim is contrary to truth?

Much has been written on the geometrical shape of the cells of the honeycomb, and on the cause of their form being invariable. Mathematicians have determined that among all possible shapes of cells, the bee has selected that best adapted to economize the material with which it works. How the sage insect should hit on such a form had received no explanation till the following, which we owe to Mr. Swan, and which, we think, will amuse the reader :—

“For some remarkable contrivances of the animal in connexion with vision, the mechanism of the eye almost directs the intellect and the mode of action of some of the muscles, as when the hexagonal cells of the honeycomb of the bee, and of the nest of the wasp, are constructed in accordance with the hexagonal facets of the surface of the eye.”—Page 11.

The idea we had formed of Mr. Swan's previous publications

on the Nervous System was, that they displayed a large share of laborious accuracy. His recent works on the Brain and the Optic Nerve, we grieve to say, exhibit proofs of labour certainly, but of labour misdirected, and therefore misspent. He seems to have a quantity of preconceived notions of his own to work out, while his physiological theories, and even his descriptions of structure, are delivered in a manner so bewildered as almost to defy criticism.

MEDICAL LICENCES.

WHILE the question of Medical Reform is pending it may be useful to give an abstract of the Returns from the various “qualifying” Institutions in Great Britain and Ireland, made in reply to questions transmitted to them by the House of Commons. We have, accordingly, prepared a condensed account of these returns; and this week present a Table which shows at a glance the numbes of qualifying Institutions in Great Britain and Ireland, the titles of the qualifications a Medical man may obtain, and the numbers conferred of each qualification during the last ten years.

Returns for the last Ten Years of Medical “Qualifications.”

QUALIFICATIONS.	ENGLAND.							SCOTLAND.							IRELAND.						Totals in Great Britain and Ireland for Ten Years.			
	Oxford.	Cambridge.	London.	Durham.	College of Physicians.	College of Surgeons.	Apothecaries' Society.	Total for England.	Edinburgh.	Glasgow.	St. Andrews.	University & King's College, Aberdeen.	Marschal College, Aberdeen.	College of Physicians, Edinburgh.	College of Surgeons, Edinburgh.	Faculty of Physicians and Surgeons, Glasgow.	Total for Scotland.	University of Dublin.	Queen's University.	King and Queen's College of Physicians.		Royal College of Surgeons.	Apothecaries' Hall.	Total for Ireland.
Bachelor of Medicine	10	27	146	5	124	57	2823	183	524	329	497	5	71	68	1066	367	3305	106	34	71	56	214	106	365
Doctor of Medicine	7	23	95	5	124	57	2823	130	524	329	497	258	90	68	1039	324	1608	26	34	71	56	214	60	1888
Master of Surgery	11	11	11	11	124	57	2823	2938	11	20	11	11	11	11	1039	324	30	11	11	11	512	214	797	5186
Licentiate	11	11	11	11	57	294	2938	57	11	11	11	11	11	11	1039	324	11	11	11	11	56	214	797	5186
Extra-Licentiate	11	11	11	11	57	294	2938	57	11	11	11	11	11	11	1039	324	11	11	11	11	56	214	797	5186
Licentiate in Midwifery	11	11	11	11	61	539	600	600	11	11	11	11	11	11	27	43	70	11	11	11	26	14	40	4710
Fellows	11	11	11	11	4082	4082	4082	4082	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Members	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Surgeons	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	17	61	241	5	242	4915	2823	8304	524	359	497	263	161	68	1066	367	3305	143	34	97	582	214	1070	12679

Holders of Letters Testimonial granted by the College of Physicians of London to those who would practise in England. No Returns.
“ Certificates of fitness for the Army or the Navy. No Returns.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON THE DISTINCTIONS BETWEEN MIASMATIC AND CONTAGIOUS DISEASES.

By Dr. MUHRY.

Miasmatic diseases are found (1.) to be dependent upon soil and moisture, temperature and time of year, like vegetation. 2. They often attack and exert their influence suddenly, immediately after their invasion, without any long, regular period of incubation, like a poison. 3. They may also repeatedly and chronically affect the same individual without diminution of their power. 4. They are not regenerated in the human economy.

Contagious diseases (1.) are found to be completely independent of soil, as also, with some exceptions of temperature, and time of the year. 2. They always exert their influence during a long regular period of incrementum or incubation. 3. They occur, for the most part, only once in the same individual, or recur only after a long interval. 4. They are regenerated in the animal economy only.

The relations of the contagious diseases to temperature, with respect to their geographical distribution, may be further indicated as follows:—1. The majority, as stated above, are ubiquitous, that is, are independent of temperature, and in our temperate and cold zones are independent of, or only slightly dependent on, periods of the year. These are variola, scarlatina, rubeola, pertussis, mumps, aphthæ, puerperal metritis, roseola, hospital gangrene, malignant pustule, and, perhaps, miliaria and pemphigus. 2. Those which are dependent upon temperature, and also upon the periods of the year, may be thus distinguished:—(1.) Those which thrive especially in high temperatures and under the tropics, as lepra, framboesia, dysentery, and aphthæ. (2.) Those which especially prevail in a cold temperature and the Polar zone, as erysipelas, puerperal metritis, croup, and pertussis. (3.) Those which especially prevail between the highest and lowest temperatures, between the tropical and polar zones, as the plague and typhus.—*Henle and Pfeuffer*, Band 6, p. 226.

ON THE CHOLERA IN CHILDREN.

By Dr. MAUTHNER.

Dr. Mauthner reports that in the year 1855, which was a year of scarcity, the cholera at Vienna committed great ravages. Of 78 severe cases occurring in children admitted into his Klinik, 52 died, and 26 recovered; while of 92 slighter cases received into the Polyklinik, 34 recovered, 10 died, and 15 were taken to the Hospital. Of all the epidemics since 1831, this has proved the most fatal. Of near 5500 cases of cholera which were officially made known, one half died; and the children, taken alone, did not exhibit more fortunate results, for only one-third of the more severe cases recovered, and altogether only one-half.

Dr. Mauthner distinguishes three forms:—*cholera levis*, (diarrhœa cholericæ,) *cholera gravis*, or *vera*, (vomiting, diarrhœa and cyanosis,) and *cholera gravissima*, (cholera sicca, asphyctica, fulminans). Of all the means he has found to exert the most decided effect in children is the nitrate of silver, but, in dangerous cases, it has to be given in rapid and large doses. Thus a clyster containing two grains in an ounce of water, with some oil, was administered every hour, while every quarter of an hour a teaspoonful was given of a solution of one grain in two ounces of water. This medicine was often the only one that the child would take that kept on the stomach, while it produced no ill consequences, and always at least arrested the pathognomic watery diarrhœa. This was not necessarily followed by recovery, for the blood, becoming so totally changed from the commencement, all often proved in vain. Frequently, however, by the cessation of the diarrhœa and vomiting, time was gained, which, in a disease of such rapid course as the cholera, is of great value.—*Journal für Kinderkrankheiten*, Band 26, p. 430.

THE INCREASING FREQUENCY OF CHRONIC DISEASE IN CHILDREN.

By Dr. MAUTHNER.

Owing to the high price of nutritious articles of diet, chronic diseases of the liver, as fatty, atrophied and hypertrophied liver, are now frequently met with among children. These conditions cannot usually be substantiated clinically as

independent existences, but their important pathological significance is exhibited at the bed-side in their influence on other diseases. The lungs in these liver diseases become overloaded with a carbonaceous and nitrogenous blood; and with this habitual congestion the accompanying bronchial catarrh assumes a peculiar aspect, which is exhibited in nocturnal orthopnœa and asthmatic paroxysms of cough, accompanied by abundant frothy watery mucous expectoration; (œdema pulmonum). This catarrh is attended by severe fever, and a marked suffering of the entire economy. In this form the *Ext. Cannabis Ind.*, in doses of from two to six grains daily may be employed usefully, being preferable to opium, as it does not suppress secretion or paralyse the already enfeebled pulmonary parenchyma. Belladonna is also to be preferred as not stimulating the mucous membrane of the air passages, while it exerts a more decided influence over the nervous elements of the disease than hyoscyamus. It may be given in powder or solution, and does not give rise to any bad taste or ill consequences. Under its influence the asthmatic attacks occur seldomer, the appetite returns, and the child becomes more lively, while expectoration is not disturbed. In cases in which it is deemed desirable to influence this secretion, from three to six grains of the *flores Benzoes* daily are useful, and, on account of their not irritating the alimentary canal, are preferable to antimonial preparations.

Journal für Kinderkrankheiten, Band 26, p. 432.

EXCERPTA MINORA.

Falling off of the Hair.—Dr. Landrer considers it an error to mix substances intended to strengthen the hair in oils or fatty bodies, in which they are not soluble, and are so enveloped that they can exert no influence upon the relaxed skin. Thus 5 grains of quinine taken internally, or 10 grains used in a lotion endermically, will exert more influence than $\frac{1}{4}$ an ounce employed in an ointment. He has found great benefit from rubbing a watery solution of tannin into the roots of the hair. The modern Greeks employ a decoction of the root of the *Atractylis gummifera*, the *chamæleon leucos* of Dioscorides.

—*Buekner's Repeater*, 1856, No. 8.

Belladonna in Mercurial Salivation.—Dr. Höring speaks in warm terms of the remarkable success attending the employment of this substance as recommended by Erpenbek. In two cases of peritonitis, in which mercurial salivation was induced, $\frac{1}{2}$ grain of the powder, given twice daily, soon dissipated all ill effects.—*Schmidt's Tarhb*, B. 92, p. 173.

Treatment of Itch.—After the trial and comparison of the various modes of treatment, M. Bourguignon accords the preference to the following formula:—Glycerine, 50 drachms, finely powdered sulphur, 25 drachms, 2 yolks of eggs, and tragacanth powder, q.s., adding essences to mask the smell.—*Union Médicale*, No. 156.

Remarkable ease of Congenital Phymosis.—A well-built man came to consult Dr. Landrer on account of a difficulty in passing his urine, and exhibited a complete closure of the prepuce. The penis was of its normal length, and the prepuce having numerous plaits, formed quite a closed sac, which terminated at the mouth of the urethra. On drawing the prepuce tight over the glans the folds disappeared, and corresponding to the orifice of the urethra, a tendinous strip, a line in length, could be discerned. The prepuce was perfectly movable over the glans, no cohesion between them having taken place. The urine was passed through a pin's head aperture in this tendinous stripe, which easily admitted a probe. The urine could only pass drop by drop; and only when the opening was parallel to that of the urethra was a minute stream possible. The man had become a parent.—*Wien Waeleusch*, 1856, No. 49.

GENERAL CORRESPONDENCE.

POOR-LAW MEDICAL REFORM.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the last number of your Journal you inserted a correspondence between myself and the Romsey Board of Guardians, together with some remarks by our indefatigable Poor-law Medical Reformer, Mr. Griffin, of Weymouth; I have now to beg the favour of your finding a space for this communication in your next Journal, as it is right the Profession should know the result of my resignation.

For almost twenty years I held a district in the Romsey Union, on account of its proximity to my practice, and because, having been born in the district, I was well acquainted with the poor. The salary was merely nominal,—13s. 10d. per week; population, 1400; area, 5000 acres. I hoped from time to time that the whole system would be altered, but "hope long deferred maketh the heart sick." I at length determined to resign, unless an increase in my stipend were agreed to. I made application to the Board, was refused, and I resigned.

I wrote to my Medical brethren and colleagues, and among the latter I addressed the following note to Mr. Francis Taylor and Mr. Godwin (partners):—

"GENTLEMEN,—As one or both of you are my colleagues, I forward the enclosed copy of correspondence with the Romsey Board of Guardians in reference to an application for 'increase of salary.'

"Although you have not joined in the movement originated by Mr. Griffin, I trust I shall have your sympathy and support.

"Yours truly, L. OWEN FOX.

"January 3rd, 1857."

Mr. Francis Taylor did not think it "*wise or necessary to refuse the work on the terms.*"

Contrast this conduct, Mr. Editor, with the straightforward and manly replies of my other medical neighbours.

Mr. Nunn says, "I shall be happy to support you in any way."

Mr. Sainsbury intimates, "That he did not even reply to the application of the Board." "That the salary is disgracefully low."

Mr. Buckell writes, "I am surprised to hear that Messrs. Taylor and Godwin have taken the district. Mr. Griffin and his coadjutors may toil for ever without good results, unless there is some honest, brotherly understanding between medical men themselves." How often are we told that the present state of things is our own fault! and truly is it not so?

I am, &c. L. OWEN FOX.

Brighton, Jan. 13, 1857.

We have been obliged to abridge Mr. Fox's letter, but have published quite enough to show that we can never hope to obtain justice from Poor-law Guardians or the Poor-law Board until we are true to each other. In this age of testimonials, we would suggest that a testimonial should be presented to Mr. Francis Taylor by his professional brethren.—ED.

[To the Editor of the Medical Times and Gazette.]

SIR,—The present critical position of Poor-law Medical Officers demands the prompt and earnest co-operation of every Union Surgeon, the general assistance of the Profession, and of every lover of justice and practical benevolence to the sick poor.

The exertions which have been so strenuously made, and so long sustained by Mr. Griffin, have awakened a certain interest in the ranks of Poor-law Surgeons, and forced attention to their case from the Poor-law Board, and from sundry members of Parliament.

From certain leading articles in the Medical Journals, as well as from Mr. Griffin's special appeal to his constituents, it is evident that some Lethal spell is preventing that universal outspoken and steady uniform action which alone can satisfy the legislature and the public that the Union Surgeons and the Profession are determined to persevere in claiming redress; to use the words of Lord Shaftesbury on the subject, "not as a bounty, but as a right."

Ten years ago it was my privilege to work as honorary secretary to the Convention of Poor-law Medical Officers, in conjunction with Dr. Hodgkin (chairman of the committee), and a noble phalanx of gentlemen, who laboured to improve the status of the Union Surgeons, and the position of the sick paupers consigned to their treatment. That at this remote date efforts in the same direction are still needed, that they are still going on, is at once evidence of the existence of a deep-rooted evil, and of an abiding sense of the same operating, more or less vigorously, but unceasingly among the Profession.

Some mitigation of evil undoubtedly ensued from the united, though too fugitive exertions of the Convention. The late President of the Poor-law Board, Mr. Charles

Bullar, and his immediate successor, Mr. M. Baines, admitted the grievances complained of, admitted the expediency of a change and amelioration, rather than promised the exercise of official authority to enforce measures which they held to be righteous and just.

The familiar adage, "The weakest goes to the wall," has hitherto been illustrated in the experience of our professional brethren in the matter of Poor-law government as in other efforts at Medical reform. May we now, by prompt and sustained union, turn the sinister bearing of the phrase on the Poor-law Board and the Boards of Guardians. Let not some discouragement through lack of success, some discrepancy of opinion on matters of detail, distract the attention of our brethren from, or weaken their efforts to press forward such measures as may benefit the sick poor, and secure to themselves a remuneration and control befitting their arduous exertions, and their sacred responsibilities.

It is to be hoped that every gentleman will return the Statistical Form which Mr. Griffin, in the name of the Poor-law Medical Association has so widely circulated. Though many of the facts which may be thus elicited have been in substance again and again before Parliament, they will now come, in company with other data, as fresh evidence of the existence of a crying evil at the present moment, as fresh proofs of a compact between a body of professional gentlemen, who respectfully demand for themselves and the sick poor a redress of grievances, and are firmly determined to persevere in seeking the same.

The reform we seek might be wrung from reluctant Boards and a reluctant legislature, were we in our own ranks more to one another. Too many of our brethren are the victims of an overwrought competition—one man rising against his brother.

Let the only strife and competition now be among the Union Surgeons to co-operate at the present time with the Poor-law Medical Reform Association and Mr. Griffin. No one has a right to isolate himself from the general movement for the general good. Each gentleman in his district may use his leisure, spare money, and personal influence to press the cause on the provincial Members of Parliament, that Sir John Trollope may have a loud voice raised up in the Commons to strengthen his promised advocacy in favour of the sick poor and the Poor-law Medical Officers.

I am, &c. CHARLES F. J. LORD.

Hampstead, January 13th, 1857.

[To the Editor of the Medical Times and Gazette.]

SIR,—I beg to inform you that a meeting of the Students of this Hospital took place this day, to take into consideration the subject of Poor-Law Medical Reform, when the following resolutions were submitted to the meeting, Mr. Corner being in the chair.

1. Proposed by Mr. Rutledge, and seconded by Mr. Farr—

"That this meeting considers the payment of the Union Medical Officers under the present system as totally inadequate to the demands made on their time, labour and skill, the expenses to which they are necessarily put in performance of their contracts, the risks they run in execution of duty, and the responsibility that devolves upon them." Carried unanimously.

2. Proposed by Mr. Down, and seconded by Mr. Laurence—

"That this meeting considers that the Poor-Law Guardians ought not to have the unlimited power of fixing the salaries of the Medical Officers, in the reduction of which they have evidently a personal interest." Carried unanimously.

3. Proposed by Mr. Mackenzie, and seconded by Mr. Brock—

"That, without pledging itself to details, this meeting cordially approves of the principles laid down in the petition to Parliament, drawn up at a meeting held at the Freemasons' Hall on May 30th, 1856." Carried unanimously.

4. Proposed by Mr. Griffith, and seconded by Mr. Harkness—

"That this meeting tenders its thanks to R. Griffin, Esq., for his exertions on behalf of the Union Medical Officers, and promises him its cordial co-operation and support." Carried unanimously.

5. Proposed by Mr. Jenkins, and seconded by Mr. Hancock—

"That a copy of these resolutions be forwarded to R.

Griffin, Esq., and his information and advice be solicited as to further proceedings, especially as to calling an aggregate meeting of Medical Students." Carried unanimously.

6. Proposed by Mr. Giles, and seconded by Mr. Birt-whistle—

"That a copy of these resolutions be forwarded to each of the Medical Journals." Carried unanimously.

I am, &c.

GEORGE EVAN FARR,

Hon. Secretary, *pro tem.*

London Hospital, January 12th, 1857.

CASE OF ANN PALMER. POISONING BY TARTARIZED ANTIMONY.

[To the Editor of the Medical Times and Gazette.]

SIR,—Dr. Taylor has pointed out to me an unintentional error in a paper just published by me in the January number of the *Liverpool Medico-Chirurgical Journal*, which I beg the favour of your enabling me to correct through your pages, instead of waiting for the next number of that journal in July. I have attributed to him and Dr. Rees the opinion that in Mrs. Palmer's case antimony had been administered shortly before death, because it was found in the contents of the rectum. It is true that it was found there, and that they were of opinion it had been recently administered, but their opinion was not founded on its presence in this situation, but upon the vomiting and other symptoms on the morning of her decease, and their discovery of the poison in the contents of the stomach as well as those of the large intestine. Your insertion of this correction will oblige

J. BIRCKECK NEVINS.

25, Oxford-street, Liverpool, January 6, 1857.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

JANUARY 6, 1857.

Mr. ARNOTT, President, in the chair.

ANNUAL MEETING FOR THE ELECTION OF OFFICERS.

The SECRETARY's report having been read,

A vote of thanks was then proposed and carried to the Secretaries, for their assiduous services in getting out the volume, more especially to Dr. Quain, upon whom the labour had chiefly fallen, and towards whom the feeling of the meeting was most warmly expressed.

The ordinary business of the evening was then proceeded with. (For report of which, see below.) The ballot having taken place, the scrutineers, Dr. Snow and Mr. Brodhurst, announced that the following gentlemen had been elected to the several offices for the ensuing year, and the President accordingly declared them duly installed.

President.—* Thomas Watson, M.D.; *Vice-Presidents.*—Henry Bence Jones, M.D., F.R.S.; William John Little, M.D.; James Risdon Bennett, M.D.; * John Scott, M.A. M.D.; * James Moncrieff Arnott, Esq., F.R.S.; William Fergusson, Esq., F.R.S.; Prescott Gardner Hewett, Esq.; John Simon, Esq., F.R.S.; *Treasurer.*—* Richard Quain, M.D.; *Council.*—Edward Henry Sieveking, M.D.; William Baly, M.D., F.R.S.; John Syer Bristowe, M.D.; Edmund Lloyd Birkett, M.D.; Charles West, M.D.; Francis Sibson, M.D., F.R.S.; William Camps, M.D.; * Thomas Harrington Tuke, M.D.; * Theophilus Thompson, M.D., F.R.S.; * Samuel Wilks, M.D.; Henry Gray, Esq., F.R.S.; Henry Haynes Walton, Esq.; Henry Obré, Esq.; John Morgan, Esq.; William Augustus Hillman, Esq.; William Oliver Chalk, Esq.; Jonathan Hutchinson, Esq.; * John Cooper Forster, Esq.; * John Wood, Esq.; * Thomas Blizard Curling, Esq., F.R.S.; *Honorary Secretaries.*—* John William Ogle, M.D.; Mitchell Henry, Esq. (a)

Mr. SPENCER WELLS exhibited microscopical preparations illustrating the structure of a

TUMOUR FROM THE FLEXOR TENDON OF A FINGER,
which tumour he had removed from the forefinger of an old

(a) The gentlemen whose names are marked with an asterisk (*) did not hold the same office during the preceding year.

lady a month before. It had been of slow growth, but had returned after removal by another surgeon. Mr. Wells dissected it carefully from its firm attachment to the sheath of the flexor tendon. The wound healed by the first intention, but from an examination of the structure of the tumour, Mr. Wells had prepared the patient for its probable recurrence. It was about the size of a walnut, of a soft gelatinous consistence and ruddy hue, very fine bloodvessels traversing its substance in considerable abundance. The substance was uniform, but arranged in lobules having very fine enclosing membranes. Its specific gravity was 1.022. Mr. Wells said that he was indebted to Dr. Aitken for the preparations which would show that in general microscopic appearance the texture of the tumour was very like the young nucleated blastema of fibrous tissue in the earlier and progressive stages of its development; yet there was no general resemblance to fibrous or to recurrent fibroid tumours obvious to the naked eye. Its specific gravity also was peculiar, most varieties of fibroid tumours being described as hard, heavy and dense; and Mr. Wells repeated a suggestion of Dr. Aitken's, that the specific gravity of tumours should be more frequently determined after their removal, as surgeons lay great stress on the weight and firmness of tumours when forming an opinion as to their character in the living body. Mr. Wells thought it was an open question whether the tumour here brought before the Society belonged to one of the forms described as "transitional to Cancer," or, taking into consideration its lobulated character, its rudimentary structure, and the frequent occurrence of enchondroma in the fingers, it might be an enchondromatous tumour in its early condition.

Mr. SPENCER WELLS also presented a

PIN SWALLOWED THIRTEEN YEARS AGO,

he had removed that morning from the left mamma of a female twenty-nine years of age. Twenty-seven pins had been removed by Mr. Jones, a Welsh surgeon, at various intervals; twenty-five from the mamma, one from the left wrist, and one from the left knee. Mr. Henry Thomson had also removed one from the left mamma about two years ago, and Mr. Wells believed the case had been brought before the Society by him.

Mr. BIRKETT expressed a confident opinion that the case was one of those of which he had known several, in which hysterical women were in the habit of pushing pins under the skin, in order to have them cut out.

Mr. BALLARD exhibited a specimen of

EXTENSIVE INVAGINATION OF THE INTESTINE.

The subject from whom this specimen was taken was a female infant, aged 6 months. She had been fed at the breast entirely until the last week of her life, during which she had daily eaten some bread and butter. She had never had diarrhoea, or taken any aperient medicine, the action of the bowels having always been regular and natural.

On the evening of December 30th, she was suddenly seized with vomiting, and apparently great pain, which continued, but appeared to become easier during the night. Mr. B. saw her first about noon on the following day. She seemed then to have pain in the abdomen, vomited occasionally, and passed frequently a small quantity of blood-stained fluid from the anus, but no faeces whatever. These symptoms continued, with little variation, for four days, although the pain seemed to have been modified, probably, by the opiate enema, which was used daily.

On January 3rd, a larger enema was administered, containing some olive oil, and two drachms of castor-oil, which, according to the nurse's report, was succeeded by ten stools. There certainly was a little feculent matter on some of the napkins, and now no blood, but some transparent and glairy mucus. The skin was pale, and the countenance exhibited distress; there was much tenesmus. Death occurred on the morning of January 4th, being the fifth day of the illness.

The peritonæum contained a few drachms of brownish serum; the blood-vessels of the small intestine were much congested, the intestine being distended with air. The cæcum could not be discovered, but on tracing the small intestine, the ileum was found to terminate in the descending colon, which is much puckered, and, together with the rectum, is distended to within two inches of the anus, with a volvulus, consisting of a portion of the ileum, and the whole of the superior part of the large intestine. The volvulus is of a very dark colour, from congestion, and the presenting part affords

to the top of the finger the same sensation as the adult os uteri. The posterior wall of the greater curvature of the stomach is reduced to a soft, gelatinous state, and it allowed the contents of the organ, (about three ounces of partially digested milk,) to escape on the first attempt to raise it from its position. It affords a good illustration of the destruction of the coats of the stomach by its own secretion, after death has occurred.

Mr. ARNOTT then addressed the meeting, on his retiring from the President's chair. He had felt his election to that post no small honour, and in the fulfilment of its duties he had experienced great pleasure. It had been his lot to be President, at different times, of various scientific Societies, but no office of that kind had been to him the source of so much gratification and profit as the one he now resigned. The great variety of important subjects brought before the Society, the conciseness of the information given, the zeal and extensive knowledge of the members, had conspired to make the post both agreeable and highly instructive. He had found that he had but to come down and take his seat at these meetings, and hear from the best informed men of the day opinions and statements of fact on the most interesting questions before the Profession. It had been to him a source of great satisfaction that the two years during which he had held office had been such successful ones, both in respect to the interest of the meetings, the attendance of members, and the value of the volumes of Transactions. If asked to give any hints for the future improvement of the Society, he must say that he had none to give; it had but to proceed in the way in which it had formerly done.

A vote of thanks to the retiring officers was proposed by Dr. Williams, seconded by Mr. Curling, and carried unanimously. The meeting then broke up.

OBITUARY.

MR. HENDERSON.

WE announced last week another addition to the long list of those members of our profession who have fallen victims to their zeal in the discharge of their duty. We refer to Mr. Henderson, a student of St. George's Hospital, who died last week of scarlet fever, contracted while performing for a short time, in the absence of a friend, the duties of house-surgeon to the Hospital for Sick Children. The deceased was a young man of much promise, distinguished for energy and unwearied activity in the march for professional knowledge. He had acquired by industry, in one of our colonies, the means of pursuing his studies in England; and had come over here with the laudable ambition of obtaining such knowledge of Medicine as would enable him to provide for relations in Australia, who are now left destitute by his untimely death. The shortness of the time at his disposal rendered him, perhaps imprudently, diligent in working at the many subjects with which a "general practitioner" ought (especially when remote from professional assistance,) to be familiar; and thus the malignant disease by which he was unfortunately attacked found an easy prey in a body exhausted by unceasing labour, and a mind wearied with anxiety and study. It may be some consolation to his friends to know that his worth was appreciated, and his death deplored, by those who knew him here.

THE LATE DR. ALEXANDER, OF HALIFAX

THE remains of this venerable gentleman were interred last week, and were followed by the Medical Profession and many friends of the family. Descended from a long line of Medical predecessors, he was the second son of Robert Alexander, Esq., of Hopwood Hall. For upwards of 150 years to the present day, there has been no member of the family out of the profession of the army, navy, law, medicine, or divinity. The late doctor was educated at the Hipperholme Grammar School, when that seminary was filled by a large number of the sons of the then principal inhabitants of the West Riding, and, indeed, of more remote districts. Among his contemporaries and associates were the Wilsons, the Childers, the late Sir F. L. Wood and some others, who became prelates, or otherwise distinguished at the bar and bench. Well grounded in classics, he became

a thorough master of the Latin and Greek languages, in which he further perfected himself as a Medical student, all the works on medicine at that time being published in those tongues. Celsus, Morgagni, Sydenham, and Boerhaave were through life his favourite authors. Horace had ever a lively interest for him; and the only thing, we believe, he ever published was a translation into English verse of the Odes of that author. Inheriting the succession to a large and widely extended practice, he was only suffered to spend two sessions in study at the Hospitals in London, from whence he was summoned to the pursuit of his laborious Profession, which for thirty years was one of incessant duty. Not confined merely to the townships comprised in the large parish of Halifax, he and his brother Disney were constantly called to the adjoining districts of Huddersfield, Bradford, Littleborough, and Rochdale; while their cousin, the late Dr. William Alexander, was quite as well known in Huddersfield, Dewsbury, and Leeds as in his native town; at a time, too, when travelling was practicable only on horseback, chiefly through the bridle-roads. It is believed there was not a single family of note in the town or neighbourhood professionally unknown to them. For about thirty years the late Dr. Alexander pursued his active duties, travelling, it is supposed, in the saddle between six and seven thousand miles during the year. In 1817, he took the degree of Doctor of Medicine in the University of Aberdeen, and subsequently limited his practice to the less harassing functions of Physician. "If," says a local paper, "in the worthy doctor's career, he ever had enemies (which is much doubted), he had outlived them and forgiven them. Single-minded and upright, he was truly a man without guile. Thoroughly independent in feeling, he never in his long life sought a favour from his fellow-man. Local distinctions, often coveted, had no attractions for him. In the possession of excellent health, which he prized highly, and a happy domestic circle, he was perfectly content, and thought himself blessed. He has well served his generation, lived a virtuous and Christian life, and his very last breath, we understand, was spent in offering up to the Giver of all good, thanksgiving and prayer."

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, January 8, 1857 :—

ALLEN, JOHN WILLIAM, jun., London.

DE NICEVILLE, CHARLES FRANCIS HIPPOLITE, Clifton.

FARR, GEORGE EVAN.

RILEY, JAMES, Birmingham.

MOORE, EDWARD DENNISS, Birmingham.

APPOINTMENT.

NORWICH.—The Court of Guardians of the Norwich Workhouse have elected Mr. Woodhouse to be the Medical Superintendent.

BEQUEST.

The late Antony Gibbs, Esq., of Merry Hill, Herts, has bequeathed to the Nightingale Fund £100, and to the Bournemouth branch of Brompton Consumption Hospital, £100.

TESTIMONIAL.

A handsome gold watch is about to be presented to Mr. Milson, of Hanging Heaton, Yorkshire, and formerly of Swineshead, Lincolnshire, by the inhabitants of the latter village, bearing the following inscription :—"Presented to Mr. Richard Odlin Milson, surgeon, by a few who valued his friendship while practising at Swineshead.—Christmas, 1856."

THE London and Provincial Medical Directory for 1857 registers 10,480 names of Medical men, with a "Too-late List" of 72, and a "Supplemental List" of persons practising who have not made any return of their qualifications, of 557; giving a total of 11,109. This number shows an increase on 1856 of 77.

EDINBURGH ROYAL COLLEGE OF SURGEONS' CONVERSAZIONE.—The second conversazione of the season, given by the Fellows of the Royal College of Surgeons, was held on Friday, Jan. 9, in their Hall. The invitations included a large number of members of the Faculty of Advocates—the occasion being, as remarked by the President, *par excellence* the law night. Professor George Wilson, M.D., F.R.S.E., delivered an able and eloquent lecture on “Phosphorus and Nitrogen as elements of Plants and Animals,” which was listened to with marked interest by the learned audience, and repeatedly and warmly applauded.

MARISCHAL COLLEGE AND UNIVERSITY, ABERDEEN.—At the late Autumn Examination Terms, the degree of M.D. was conferred on the following gentlemen:—Charles Coates, Yorkshire; John McGrigor, A. T. Croft, Somersetshire; John Fitzpatrick, H.E.I.C.S.; Alexander E. Mackay, R.N.; Charles Paterson, Aberdeenshire; James Paterson, Aberdeenshire; John Peet, Grant Medical College, Bombay; John Watt Reid, R.N.; Alister Stuart Robertson, Perthshire; Andrew Wallace, Aberdeenshire; and the degree of M.B. on the following:—William H. Fitzpatrick, Lancashire.

HARVEIAN SOCIETY OF LONDON.—The following is a list of gentlemen elected as officers of the Society for the year 1857:—*President*, Alexander Ure, Esq.; *Vice-Presidents*, John Birkett, Esq. F.L.S.; Wm. Camps, M.D.; E. H. Sieveking, M.D.; Geo. Webster, Esq.—*Treasurer*, Joseph Ridge, M.D.—*Honorary Secretaries*, W. S. Britton, Esq.; E. Hart Vinen, M.D., F.L.S.—*Council*, W. H. Borham, Esq.; W. F. Cleveland, Esq.; T. Weedon Cooke, Esq.; E. Headlam Greenhow, M.D.; J. E. Pollock, M.D.; H. Spencer Smith, Esq.; T. J. Ashton, Esq.; T. Ballard, Esq.; W. M. Graily Hewitt, M.B.; H. C. Stewart, Esq.; H. Thompson, M.D.; H. Haynes Walton, Esq.

THE SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—On Tuesday afternoon, the annual meeting of the subscribers and friends to this institution was held at the Hospital, the Rev. J. H. Gurney in the chair. The Report made an urgent appeal for additional funds to enable the Committee to obtain more eligible premises for carrying out the object of the charity. The present building was totally inadequate for the accommodation of the numerous persons requiring relief. During the ten years it had been established, 80,245 persons had received benefit from the institution, and during last year 8,490. On the 1st of the present month the out-patients were 209, and the average number of applications per day exceeded 130. The Ladies' Committee had relieved upwards of 1,000 persons. The balance-sheet showed the receipts for the past year to have been 1,395*l.*, and the expenditure to over 1,700*l.*

LONDON HOSPITAL.—From a Summary of Accidents brought to the London Hospital during the last fifteen years, it appears that the number of fractures was 16,302; of wounds, 31,324; of contusions, 44,683; of sprains, 13,505; of dislocations, 1690; of concussions, 758; of burns and scalds, 6385; of hernia, 1064; of bites of dogs, 1274; of retention*, 1106; of hæmorrhage*, 315; of foreign bodies in throat*, etc., 841; of corrosion from acids*, 31; of thecal abscess*, 948; of inflammation*, 4026; of attempts at suicide, 492; various, 3553; total, 128,297.—In those cases to which a * is affixed, the classification was not carried out prior to 1851; the numbers, therefore, only apply to the last six years.

JENNY LIND INFIRMARY, NORWICH.—The annual meeting of the governors of this charity was held on Wednesday week. Sir S. Bignold, the chairman, having read the notice convening the meeting, said he was glad to state that the institution now stood in far more favourable circumstances than at any time since it had been established, owing to the aid it received from that excellent lady, whose name it bore. It appeared that she had given to the institution, last year, no less than 354*l.* 15*s.* 5*d.*, in addition to the 1,200*l.* left, at her request, for the foundation of the charity, seven years ago.

ROYAL HUMANE SOCIETY.—At the Annual Meeting on Wednesday, Mr. B. B. Cabbell, M.P., in the chair, it was stated that during the past year 142 cases, in which 153 persons were concerned, had been reported to the Society. Of these, 149 had been successfully treated, and four were beyond recovery; besides which there had been twenty-five attempted suicides. Silver medals were awarded, among others, to Mr. W. Bernard, Army Surgeon, for saving

Samuel Barrass, Superintendent of the Army Works Corps in the Dardanelles. Dr. Barker announced that it was intended to try Dr. Marshal Hall's new treatment for the recovery of persons who had been immersed.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, VICTORIA PARK.—The annual general meeting of the governors of this institution was held on Monday at the London Tavern. The Report stated that the number of out-patients has been 5,687, or 953 more than during the previous twelve months, and the average attendance each week has been 812. To these must be added 242 patients who have been admitted into the wards of the hospital, making a total of 5,929 persons relieved during the year. Of the in-patients 50 have been discharged entirely cured, 139 have received more or less marked advantage, and 18 have died. The total receipts since the last annual Report have amounted to 5,399*l.* 16*s.*, and the expenditure to 5,812*l.* 15*s.* 11*d.*, and there is a balance at the bankers' of 106*l.* 1*s.* 10*d.* The committee have made arrangements with a kindred charity—the Western Institution—by which they will be enabled to send patients to Torquay. The customary thanks to the officers and the chairman concluded the proceedings.

THE NEW SEAMAN'S HOSPITAL.—The Dreadnought (late Caledonia), hospital ship, will shortly be removed to Greenwich, to take the place of the old Dreadnought, now moored in the river, as an hospital ship for seamen of all nations. The new hospital is at present an object of much interest, and has been fitted up in a most complete manner. The vessel was presented by the Government to the Seaman's Hospital Society, and has been under the hands of 200 workmen for the past five months. She is much larger than the old Dreadnought, and since her arrival here another deck has been added, and her upper deck has been considerably enlarged. She now contains five decks. The main deck contains a spacious and well-arranged dining-room for the use of the Surgeons, Assistant-Surgeons, purser, and other officers; a store-room, and a chapel. The middle, or gun-deck, contains on the starboard and port sides two commodious surgeries, and the dispensary is on the aft portion of the deck. The lower gun-deck contains well-arranged bed-rooms for the nurses, and a museum for the use of the Medical officers of the establishment. The lower, or orlop deck, which has been added at this yard, is well fitted for the reception of patients, and contains one of Downton's pumps—which is connected with hose—to be used in case of fire, and for washing the decks. The ventilation of the various departments of the vessel has been especially attended to, and six large tanks are provided for a constant supply of water. Baths are also provided on each of the decks, and a constant supply of hot water will be available by means of an improved apparatus connected with each department. The upper deck and fore-castle are provided with an awning, and every arrangement has been made to secure the comfort of patients who may be able to walk on this portion of the vessel.

MEDICAL KNIGHTHOOD.—Professor Simpson, of Edinburgh, has received a very pretty Christmas gift from King Oscar of Sweden, namely, the Knighthood of the Royal Order of St. Olaf.

QUEEN'S HOSPITAL, BIRMINGHAM.—Since the opening of this Hospital in October, 1841, upwards of 70,000 patients have been admitted, and notwithstanding the strictest economy, it is found that each in-patient costs for diet, medicines, nurses, etc., 10*s.* 5*d.* per week, and that an in-patient remains in the Hospital on an average 35 days; consequently every in-patient recommended by a subscriber of one guinea is a considerable loss to the Hospital.

OFFICERS OF THE ACADEMIE DE MÉDECINE DE PARIS FOR 1857.—President, M. Michael Levy; Vice-President, Langier; Annual Secretary, M. Depaul; Administrative Council, MM. Laugier, Begin and Robinet.

ACADEMIE DES SCIENCES.—The vacant place of corresponding member in the Section for Botany has been filled up by Sir William Hooker, of Kew. He was placed by the Committee alone on the first line, while on the second line, and *ex æquo*, were placed Braun of Berlin, Fries of Upsal, Gray of Cambridge, U. S. Hofmeister of Leipsic, Joseph Hooker of Kew, and Parlatore of Florence.

FROM a list of the County and Borough Coroners for England and Wales, it appears that there are but 28 Medical Coroners to 141 Legal.

ROYAL GEOGRAPHICAL SOCIETY.—At a meeting of this Society, held on Monday, the following gentlemen were proposed as candidates for election at the next meeting:—Dr. Armstrong, M.D. R.N.; Dr. A. T. Chalmer, M.D.; and Dr. W. F. Cumming, M.D.

A ROYAL COMMISSION has been appointed for the purpose of inquiring into the state, custody, and authenticity of certain non-parochial registers of births or baptisms, deaths or burials, and marriages in England and Wales.

DR. WILLOUGHBY.—An interesting manuscript, written in 1690, on the Climate and Diseases of Ireland, by Dr. Willoughby, has been brought before the Royal Irish Academy by Mr. Wilde, who says—

“Dr. Charles Willoughby was a physician, practising in Dublin towards the end of the seventeenth century. Of his family history we at present know nothing; but it is not unlikely that he was connected with Willoughby, the celebrated ornithologist. The name is English, but from such expressions in the following manuscript as ‘my country,’ and ‘my countrymen,’ the author appears to have been born in Ireland. That he must have been a man of considerable scientific attainments, as well as high professional standing, may be inferred from the fact, that upon the establishment of the Dublin Philosophical Society in 1683-4,—the prototype of the Royal Irish Academy,—he was chosen its first Director, the office of President not having been then instituted. Dr. Willoughby was one of the Fellows of the College of Physicians named in the charter of William and Mary; he took the oaths as such on July 27, 1693; was elected a censor in the October of that year, and his death was announced at the meeting of the College held on the 18th of September, 1694.”

The following extract, printed in the quaint old style in which it was written, will no doubt interest our readers:—

“Of Physicians, Surgeons, Apothecaries, and Hospitalers abroad.

I find noe difficulty to affirm y^e our London Doctors are y^e most learned and best studyed men in y^e world; whereas in all foreign Universitys y^e young phisician, after having followed an experienced Dr. for a year or two, and taking notes of his prescriptions, wthout any more adoe commences practiser; the same method here wo^d. be much to y^e advantage of young students, if it have not this fault in it—[to] supersede all other Industry or study. I much approve y^e learning of all sciences in classes, as it is practised at Leyden, y^e public professors there (calculating y^e lectures for those raw auditors) neglect y^e applause w^{ch} might redound to y^e endeavours from more learned ears. Surgeons and apothecaries are Itenerant apprentices, removing from one great Hospitall, or one great Town to another; & wⁿ they are grown to a competency of years and experience in this errantry, they purchase their freedom by some tryall of skill in y^e faculty w^{ch} they perform in publick before y^e Majistrates of y^e place, w^{ch} is testified by an instrument under y^e seale of y^e magistracy. I believe if we should deny freedom to all such as leave y^e own country and come to plant among us, we should doe y^m noe injury, for none of y^m having undergone this tryall, they would be noe better yⁿ journeymen at home, but by our naturall civility for strangers has our law run more in y^e favor.”

MORTALITY IN THE CITY.—At the City Sewers' Commission, on Tuesday, Dr. Letheby, Medical Officer, brought up his quarterly report of births and deaths for the three months ending the 27th ult., during which period the mortality had been highly favourable, the number of deaths being only 696, instead of 767, the average number of the corresponding period for the last eight years, being an improvement of rather more than 9 per cent. The return was also favourable as compared with the mortality of all England during the same season, which was 22·08 on the 1000, and that of the town districts 26 in 1000. Local districts of the city, however, had contributed more than their share on the aggregate. Thus—in the City Union the deaths were 16·21 in 1000; in the Eastern Union, 24·66 in 1000; in the west district, 26·71 in 1000; and in the southern division of this last district, 28·81 in 1000—untoward circumstances being particularly rife in this quarter; as, for example, the factories which abound on the river itself, and the bad state of many of the dwellings of the poorer classes. Mr. Abrahams inquired what portion of the south district Dr. Letheby considered to be the worst in the returns. Dr. Letheby said that part between Blackfriars-bridge and Holborn.

MORTALITY NOTABILIA.—In the week that ended on Saturday the deaths of 1135 persons, viz. 577 males and 558 females, were registered. The average number of deaths in the ten weeks corresponding with last week of the years 1847-56 was 1251; but as the deaths of last week occurred in an increased population, the average must be raised proportionally to the increase for the purpose of comparison, and in this case it will become 1376. The number of deaths recorded last week is less by 241 than would have been returned if the average rate of mortality had prevailed.

The following are the number of Deaths from Small-pox, Measles, Scarlatina, Hooping-cough, Diarrhoea, and Typhus, in the several Districts of London, for the past Week:—

	Popula- tion.	Small- pox.	Measles.	Scar- latina	Hoop- ing- Cough.	Dia- rrhoea.	Ty- phus.
West.....	376,427	1	6	3	5	4	10
North	490,396	1	10	3	11	2	10
Central ..	393,256	..	4	8	13	2	6
East.....	485,522	1	6	10	13	1	18
South	616,635	1	4	12	13	1	5
Total..	2,362,236	4	30	36	55	10	49

DEATHS IN PUBLIC INSTITUTIONS for the Weeks ending Saturday, January 3 and 10:—

	In the Week ending Jan. 3.			In the Week ending Jan. 10.		
	Males.	Females.	Total.	Males.	Females.	Total.
Workhouses.. .. .	72	86	158	63	64	127
Prisons	3	..	3	..	..	..
Military and Naval Asylums ..	8	..	8	5	..	5
General Hospitals	59	24	83	25	20	45
Hospitals for Special Diseases ..	2	5	7	6	3	9
Lying-in Hospitals .. .. .	..	1	1	..	..	..
Military and Navy Hospitals ..	1	..	1	2	..	2
Hospitals and Asylums for Fo- reigners	1	..	1	1	..	1
Lunatic Asylums	9	8	17	1	4	5
	155	124	279	103	91	194

DEATHS REGISTERED in the Metropolis for the Week ending Saturday, January 10, 1857.

		In the Week ending Saturday, Jan. 10, 1857.						Averages of Temperature and Deaths in 10 Weeks.
		Deaths of Persons.						
CAUSES OF DEATH.	Mean temp.	AT ALL AGES.	Under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.	At 80 Years of Age and Upwards.	
Mean Temperature	36°·8							38°·3
ALL CAUSES	1135	496	148	179	228	51	1251·3	
SPECIFIED CAUSES	1098	495	148	178	226	51	1244·4	
DISEASES:—								
1. Zymotic Class	222	181	8	21	11	1	256·3	
2. Dropsy, Cancer, and others of uncertain seat	36	3	6	10	14	3	48·7	
3. Tubercular Class	149	54	56	32	7	..	192·1	
4. Of Brain, Nerves, etc. ..	110	41	12	17	33	7	136·5	
5. Of Heart, etc.	55	4	10	20	21	..	52·2	
6. Of Respiratory Organs ..	270	118	22	44	78	8	302·9	
7. Of Digestive Organs ..	63	18	14	15	15	1	64·2	
8. Of Kidneys, etc.	9	1	2	4	2	..	14·4	
9. Of Uterus; viz.—Puer- peral Disease, etc.	10	..	7	1	2	..	9·3	
10. Of Joints, Bones; viz.— Rheumatism, etc.	10	1	3	3	3	..	10·2	
11. Of Skin, etc.	3	..	2	1	..	..	2·9
12. Malformations .. .. .	..	..	..	..	..	..	4·6
13. Debility from Premature Birth, etc.	29	29	..	..	..	..	28·0
14. Atrophy	39	29	1	2	7	..	24·7	
15. Age	57	..	..	..	27	30	64·5
16. Sudden	4	1	..	..	3	..	6·3
17. Violence, Privation, etc. .	32	15	5	8	3	1	26·6	
CAUSES NOT SPECIFIED.. ..	37	1	..	1	2	..	6·9	

TO CORRESPONDENTS.

DR. SIMPSON'S NEW CAUSTIC.

The following additions to Dr. Simpson's paper arrived too late to be inserted in the early pages of the number:—

"Perhaps the general nature of most secret anti-cancer remedies could be ascertained when desired by (1st) watching the relative period of enucleation of the eschar; and (2) testing the urine for the presence of the arsenic, or other component mineral agent, a day or two after the caustic is applied."

"To obtain the fullest caustic action of the salt, the part or surface to which it is applied should be previously dried, or at least free from much moisture."

"These observations apply to the eschars following the application of these several caustics to superficial epithelial cancers and ulcers. When the part acted on is deep and large, as in cancerous mammae, the period of enucleation is with each caustic proportionally larger and more protracted."

Dr. R. W. T.—The conduct of the person mentioned, in applying for an office vacated under such circumstances is, no doubt, exceedingly reprehensible, and should receive the disapprobation of the rest of the Medical gentlemen residing in the district. But we cannot publish an account of the case unless our Correspondent allow his signature to be appended to the letter.

Emeritus.—The President of the College of Physicians is chosen from the Elects, who are themselves the electors; and the Fellows are called together only for the purpose of receiving the new President. The gentlemen mentioned are not Elects, and are therefore ineligible for the office. Dr. Alderson is an Elect, and he is also the Treasurer of the College, and the Senior Censor. The Censors are elected annually, and it is part of their duty to conduct the examination of candidates for the intra-licence. The examiners for the extra-licence are the Elects. We are unable to answer the other questions.

Mr. Evans.—Coroners are prohibited by the 7th and 8th Vict. cap. xcii. from conducting prosecutions, on pain of a penalty not exceeding £50.

SPERMATORRHOEA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The enclosed, directed to the late Vicar of this parish, came to hand yesterday. Are they creditable to any regularly educated member of the Profession?

G. H.

"London, 25, Lloyd-square.

Dear Sir,—If the book to which the accompanying notice refers treats on matters indifferent to you, I pray your pardon for directing your attention to it; if, unfortunately, you have a special interest in the subject, perhaps you will not censure me for having done so.

I am, yours faithfully,

T. H. Y."

Here follows the title of the book, the Preface we need not publish:—

"Debility and Irritability induced by Spermatorrhoea; the Symptoms, Effects, and Rational Treatment. By T. H. Yeoman, M.D., Graduate in the University of Glasgow; Honorary Member of the London Hospital Medical Society; Author on Consumption; on Bronchitis, Asthma, and Cough; on Indigestion. Late Editor of the People's Medical Journal; and Physician to the General Post-office Letter-Carriers' Provident Institution. Third Edition. London: Effingham Wilson, 11, Royal Exchange. 1855. Price 2s. By post (only from the Author) twenty-six Stamps."

An Apprentice.—The substance called Cork is a highly developed condition of the epidermis or outer bark of certain trees, especially of the *Quercus Suber*, which is a native of Spain and Portugal.

Nescio.—The College of Surgeons of England requires that Candidates for its Diploma should spend four years in professional study, three years of which must be passed in a recognised School of Medicine.

Mr. Robert W. Brown.—The liability of a partner is not obviated by the absence of a legal deed of partnership. The question, however, is a legal one, and we should recommend an application to a solicitor.

Erratum.—In our last number, by a singular mistake, the works and appointments of Mr. Alexander Ure were appended to the notice of the death of his father, Dr. Andrew Ure, of whom an obituary notice was given in a previous column.

ST. GEORGE'S HOSPITAL.—THE "HAWKINS" TESTIMONIAL.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—As a subscriber to the fund for the presentation of a bust to the family of Mr. Cesar Hawkins, I feel some surprise that the Committee of Management did not apprise us of the time when a ceremony so interesting to every old pupil of St. George's was about to take place. In common with many others, I was not even asked to view the bust when the artist had completed it. Perhaps some gentleman of the Committee will kindly explain the reason for conducting the proceedings *sub rosa*. It appears to me, that a communication of their intentions need in no way have interfered with the contemplated privacy of the presentation.

I am, &c.

FIAT LUX.

Mr. W.—It was Mr. Pilleau, not Mr. Pelham, who mentioned the case of aneurism treated by compression, under Dr. Dartnell at Chatham, at the meeting of the Army Medical and Surgical Society.

Mr. Gardner, Downham.—The British Medical Directory is not published this year.

X. Y. Z.—There have been no appointments of Dressers in the Army made lately, and there is no probability of gentlemen being required for such service during peace.

T. W. B.—The address of the Secretary of the British Association is at the Office, 6, Queen-street Place. E.C.

ERRATA IN THE LONDON AND PROVINCIAL MEDICAL DIRECTORY.

In the List of Officers, and the Advertisement to the Provincial Welsh Insurance Company, Mr. T. T. Griffith of Wrexham should have been inserted as the Consulting Surgeon to the Company, and Mr. Probert as Consulting Surgeon to the London Branch. Mr. Anthony Dillon should also have been inserted as Secretary to the Company. Mr. James Bennett, whose name was erroneously printed as Secretary, is Secretary to the London Branch.

Dr. Harley's account of his Experiments on Belladonna is at the printer's, and shall appear next week if possible.

Erratum.—In page 39, line 42, for "chemical analysis of the stomach and of the bottle," read, "chemical analysis of the stomach and of the contents of the bottle." The words "of the contents" are improperly introduced in lines 43 and 44.

A Regular Subscriber.—The lists and journal may be made to supersede the daybook very easily if the number of patients is not very large.

Letters of *Mr. Gay* and *Mr. Higginbottom* are in type, but are unavoidably postponed.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—If your "Subscriber," who inquires after an Institution, where he can place an illegitimate daughter, etc., etc., will drop me a line or two, stating the age of the girl in question, (as all depends on her age,) I will then be able to forward him the particulars, etc., of several such institutions in town and country. Address as follows:—"A.Z.O., General Post Office, St. Martin's-le-Grand, London."

Tyro.—1. There is no precise English synonym for *Muquet*. Thrush is the nearest, though not near. 2. Collodion is a solution of gun-cotton in ether. It is not used internally. 3. Erysipelas of the great toe is distinguished from gout by a variety of circumstances, which would require a page to detail. Refer to any elementary work on either disease.

Mr. Bolton's communication arrived too late for the subject to be noticed this week.

Chirurgion had better apply to the Secretary, stating all the circumstances of his case, which will, in all probability, be considered in a liberal spirit.

COMMUNICATIONS have been received from—

Professor SIMPSON, Edinburgh; Mr. FERGUSON; Dr. WALSHE; Mr. BRADY, M.P.; Mr. HAVILAND; Mr. SAVORY; Mr. WYATT; Dr. SNOW; Mr. TOYNBEE; Dr. CHILD; Mr. JEANNERET; Mr. HOLMES; Mr. GARDNER; Mr. WILDE; Dr. KID; Dr. M'WILLIAM; Mr. PHILBRED; Mr. SQUIBB; Dr. HARE; Dr. HARLEY; Dr. DUNCAN; TYRO; Mr. TOMES; Mr. CARTWRIGHT; Mr. FIELD; Dr. VINER; Dr. BADER; Mr. TOOGOOD; Mr. MAUNDER; Mr. SMITH; Mr. HUGHES; Dr. ALDIS; Dr. FALCONER; Dr. W. ALEXANDER; Mr. FOX; Mr. LORD; Mr. DERMOTT; Mr. WALDEN; Mr. METCALFE; Mr. BROADBENT; Mr. BARTLET; Dr. WHITE; Mr. JOHNSON; Mr. DUNCAN; Dr. ENGLAND; Mr. CLARK; Dr. KENDRICK; Mr. J. WILLIAMS; Dr. C. F. BENNETT; Mr. SHAW; Mr. PHILLIPS; Mr. J. SMITH; A. A.; Mr. H. BEST; Mr. J. BROWN; Dr. MASTER; Mr. SANKEY; Mr. LACY; Mr. BALDING, The Middlesex; Dr. O'CONNOR; Mr. CHIPPENDALE; DAVID HARTLEY, Esq.; G. W. CHARLTON, Esq.; Mr. AVENT; Mr. HOLMES; Dr. SLOANE; Mr. BALLARD.

APPOINTMENTS FOR THE WEEK.

JANUARY 17. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; Westminster, 1 p.m.; King's, 2 p.m.; Charing Cross, 1 p.m. MEDICAL SOCIETY OF LONDON, 8 p.m.: Dr. Russell Reynolds "On Cases illustrating the Diagnosis and Treatment of some Diseases of the Brain."

19. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.; Orthopaedic Hospital, 3 p.m. CHEMICAL SOCIETY, 8 p.m.

20. *Tuesday.*

Operations at Guy's, 1 p.m. PATHOLOGICAL SOCIETY, 8 p.m. Council meets at 7 p.m. ROYAL INSTITUTION, 3 p.m.: Professor Huxley "On the General Nature of Motion and Sensation in Living Bodies." LINNEAN SOCIETY, 8 p.m. STATISTICAL SOCIETY, 8 p.m.

21. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m. Orthopaedic Hospital, 3 p.m. GEOLOGICAL SOCIETY OF LONDON, 8 p.m. ROYAL SOCIETY OF LITERATURE, 4½ p.m.

22. *Thursday.*

Operations at St. George's, 1 p.m.; Middlesex, 12½ p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m. HARVEIAN SOCIETY, 8 p.m.: Dr. Headlam Greenhow "On Gastric Neuralgia." ROYAL SOCIETY, 8½ p.m. ROYAL INSTITUTION, 3 p.m.: Professor Tyndall "On Sound."

23. *Friday.*

Operations at the Moorfields Ophthalmic, 10 a.m.; Westminster Ophthalmic, 1½ p.m. ROYAL INSTITUTION, 8½ p.m.: Professor Tyndall, "Observations on Glaciers."

ORIGINAL LECTURES.

A CLINICAL LECTURE

ON THE

ACTION OF BELLADONNA ON THE PUPIL;

WITH SOME REMARKS ON A CASE OF

ENCEPHALOID DISEASE OF THE EYEBALL AND OPTIC NERVE.

DELIVERED AT

University College Hospital.

By T. WHARTON JONES, F.R.S.

Professor of Ophthalmic Medicine and Surgery in University College, and Ophthalmic Surgeon to the Hospital.

LECTURE II.

GENTLEMEN,—To-day I recur to the special consideration of the action of belladonna on the pupil, and after that I shall make some remarks on the case in which I extirpated the eye last Wednesday.

We have seen that the radiating muscular fibres of the iris and the circular fibres of the arteries of the corresponding side of the head are paralyzed by section of the sympathetic in the neck, as manifested by contraction of the pupil and dilatation of the arteries.

We have also seen that in such a case irritation by galvanism of the end of the upper segment of the divided sympathetic excites contraction of the paralyzed radiating fibres of the iris, with consequent dilatation of the pupil, and contraction of the paralyzed circular fibres of the arteries, with consequent constriction of their calibre.

So far, there is no doubt that the radiating fibres of the iris and the circular fibres of the arteries are, in their contractions and relaxations, under the same government.

We have seen that belladonna calls forth constriction of the arteries and dilatation of the pupil.

We have seen that this constriction of the arteries is owing to contraction of their circular muscular fibres excited by the belladonna; but as regards the dilatation of the pupil, it may be a question whether it be owing to contraction of the radiating fibres of the iris excited by the belladonna, or, on the contrary, to relaxation or paralysis of the circular fibres induced by that agent merely permitting of the unrestrained action of the radiating fibres.

Before entering into this question, let us briefly advert to the conditions on which the movements of the pupil naturally depend.

The pupil is, in moderate light, of its medium width, which is about 1-5th of an inch. It becomes contracted to a smaller size when the light to which the eye is exposed is strong, but, on the contrary, dilated to a larger size when the light is weak. During sleep the pupil is very much contracted. Some time after death the pupil is found of the medium size, showing that when it is so, as I many years ago insisted, the iris is in a state of relaxation. Contraction of the pupil to a smaller, and dilatation of it to a larger size, are consequently manifestations of an active state of the iris, the former of its circular, the latter of its radiating fibres. The contractions of either of these sets of fibres having ceased, it is the elasticity of the iris which brings the pupil back to its medium diameter. This I long ago showed, so far as the cessation of the action of the radiating fibres is concerned, by the following experiment:—Having divided the anterior segment of an eye from the posterior and removed the lens from the former, I placed it under water, and inserting a closed forceps into the pupil, allowed the blades of the instrument to separate so as to stretch the pupil to a larger size. This having taken place, I withdrew the forceps, and saw that the dilated pupil close in to its former width, a contraction which, of course, in a dead eye, could have been due only to the elasticity of the iris. That elasticity operates also in bringing the pupil from a contracted state to the medium size, may be inferred from the fact that the pupil is often contracted immediately after death, but by-and-by, when the circular fibres relax, dilates to the medium size.

That belladonna causes dilatation of the pupil by actually exciting the radiating fibres of the iris to contraction, is a view strongly supported by analogy with the observed action of belladonna in exciting to contraction the muscular fibres of

the arterics, which we have seen are under similar nervous government with the radiating fibres of the iris.

On the other hand, that belladonna causes dilatation of the pupil by actually paralyzing the circular fibres of the iris, and thus merely permitting the unrestrained action of the radiating fibres, is not supported by analogy with any observed fact as to the action of belladonna.

Furthermore, in cases in which the circular fibres of the iris are actually paralyzed, does the unrestrained action of the radiating fibres necessarily come strongly into play and dilate the pupil? I believe not. The elasticity of the iris in such a case merely brings the pupil to the medium size, and the unrestrained action of the radiating fibres only gives it a tendency to dilatation.

Thus we not unfrequently meet with cases in which the pupil cannot contract beyond the medium size—the size presented when the iris is in a state of complete relaxation. This incapacity to contract must depend on paralysis, or, at least, much impaired power of the circular fibres. In such a case, when the eye after being darkened is suddenly opened to the light, the pupil, which had become dilated, tended to contract, but did not do so beyond, or much beyond, the middle size. After which, although still exposed to the light, it again dilated, but only to a slight extent; the antagonism of the elasticity of the iris being sufficient to restrain the passive action of the radiating fibres. The same thing has often appeared to me to be the case in general paralysis of the nerve of the third pair, in which, also, in consequence of the paralysis of the internal rectus, there is, with the inability to turn the eyeball inwards, a disposition to eversion of the eyeball towards the temporal side, rather than any marked eversion when the patient tries to look forward.

In cases of iritis, in which exuded lymph has formed bands of adhesion between the pupillary margin of the iris and the capsule of the lens, we see that when the inflammation of the iris subsides, and belladonna comes to exert its full influence, the degree of dilatation of the pupil is a manifestation of force exerted by the contraction of the radiating fibres, which strikes one as being the result of positive excitement, rather than the result of the mere passive action of muscular fibres freed from the opposition of their antagonist.

To the facts I have stated in regard to the action of the pupil in man, may be added the fact, that in birds the iris, which contains no radiating fibres, and receives no branches from the sympathetic, is not affected by belladonna; showing that the circular fibres are not paralyzed by it. In birds the dilatation of the pupil is the effect of mere elasticity coming into play by the relaxation of the circular fibres; hence the pupil in birds is widely dilated after death.

The circular fibres, it is to be observed, are of the transversely marked kind, and are under the influence of the will of the animal,—a fact which renders the case of birds a negative argument in support of the action of belladonna on the radiating fibres not so decisive, perhaps, as it would otherwise have been.

Here I may recur to the question which I raised in my lecture last Monday, viz., whether stimulants dropped into the eye cause contraction of the pupil, by exciting the circular fibres of the iris, or by paralyzing the radiating fibres, and giving scope to the unrestrained action of the circular ones. The latter view would appear to be supported by analogy with what we have seen of the action of stimulants in causing dilatation of the arteries. From this, therefore, it might be argued conversely, that belladonna causes dilatation of the pupil by paralyzing the circular fibres of the iris. The argument, however, I do not think is very conclusive. I believe stimulants cause contraction of the pupil by exciting the circular fibres of the iris, in like manner as they cause closure of the eyelids by exciting to contraction the orbicularis palpebrarum.

In order to obtain a more certain decision of the question as to the mode in which belladonna acts in causing dilatation of the pupil, various experiments have been performed.

It has been thought, for example, that, if belladonna excites the radiating fibres of the iris to contract through the sympathetic, the exposure of the end of the upper segment of the divided sympathetic in the neck to the action of atropine ought, *à fortiori*, to excite dilatation of the pupil, as we have seen galvanization do.

The experiment has, accordingly, been performed by Dr. Budge, of the University of Bonn, and by Professor Sharpey.

and Dr. Harley, of this College; but none of these gentlemen has observed any dilatation of the pupil result, as it does so strikingly when the nerve is galvanized. This has been looked upon as an *experimentum crucis*.

Though the experiment shows that atropine has no direct stimulating effect upon the trunk of the sympathetic nerve in the neck, like galvanism, I cannot consider it of any force as a proof that belladonna does not excite the radiating fibres of the iris in causing the pupil to dilate.

Indeed, considering that galvanism does not act specifically on the nerve, but merely as a common irritant, like the mechanical operation of cutting or twisting the nerve, or like the action of a strong caustic, any corresponding effect from the application of so bland a substance as atropia was not to be expected.

The specific action of belladonna, I suspect, is too subtle to display itself on the cut end of a nervous trunk. Though galvanism, mechanical or chemical irritation applied to the cut end of the optic nerve would, I have no doubt, excite the sensation of light, I strongly suspect that simple exposure of the cut end of the nerve to ordinary light would have no such effect.

After the section of the sympathetic in the neck, belladonna, applied to the eye, still exerts its usual effect on the pupil, but in a less degree, as has been observed by Biffi, Cramer, Ruete, Budge, and Harley.

Having cut the sympathetic in the neck on one side, Dr. Harley accidentally dropped some of the atropine solution with which he intended to act on the nerve only into the wound. The atropine was absorbed, and caused dilatation of the pupils of both eyes, but the dilatation of the pupil on the side on which the sympathetic in the neck had been cut was only to about one half of that on the opposite side.

Resting on the negative result of the experiment of acting on the nerve alone with the atropine, as performed by Dr. Sharpey and himself, Dr. H. considers the half dilatation of the pupil on the side on which the sympathetic was cut in this experiment, to be a proof that it is only by paralyzing the circular fibres, and not by exciting the radiating ones, that belladonna acts in dilating the pupil.

As I consider the negative result of the experiment of acting on the sympathetic nerve in the neck after section with atropine, of no force as a proof that atropine does not excite contraction of the radiating fibres of the iris, I can see in the half dilatation of the pupil on the side on which the sympathetic was cut, merely an example of a muscle paralysed by the section of its nerve yielding imperfectly to a stimulus to which it is, under natural conditions, obedient. To this I might further add, that when the iris is in a state of congestion or inflammation, the pupil tends to contract, and yields incompletely to the influence of belladonna. Now, I have no doubt that the iris is in a state of congestion after section of the sympathetic in the neck as well as the conjunctiva, and other parts of the side of the head; and that there is on that account a greater tendency to contraction of the pupil than is merely the result of the unrestrained action of the circular fibres permitted by the paralysis of the radiating ones. This I believe may be one cause of the imperfect dilatation of the pupil in such experiments as those I am speaking of.

From the results of the experiment of dividing the sympathetic in the neck on the question before us, let us turn to those of dividing the third nerve.

I have said that in cases of paralysis or impaired action of the circular fibres of the iris, as in complete paralysis of the nerve of the third pair, the radiating fibres are not fully contracted, and consequently the pupil is not widely dilated, but only to little more than the medium width. To this it is to be added, that, according to Professor Ruete, belladonna causes full dilatation of the pupil as usual. In this case it can only be on the radiating fibres that the belladonna acts.

To this it is also to be added, that Bernard affirms that after section of the nerve of the third pair, belladonna still acts as usual. And Budge has observed the same thing. But in a similar experiment performed by Dr. Harley on the cat, atropine applied to the eye did not increase the dilatation.

In this case, in which after section of the third nerve in the cat Dr. Harley did not, as Drs. Bernard and Budge had done, find that atropia increased the dilatation of the pupil, Dr. H. followed up the section of the third nerve, by section

of the sympathetic, whereupon the iris gradually contracted to the medium size.

The state of matters thus induced by the section of the two nerves, Dr. H. compares to that, viz., incomplete dilatation of the pupil, which supervenes when, after section of the sympathetic, a solution of atropine is dropped into the eye.

But as in that case we have demurred to the conclusion that it is the circular fibres of the iris which are paralyzed by the belladonna, we cannot admit this view of the matter, especially as Dr. Budge has found atropia still distinctly dilate the pupil after section of both the third nerve and the sympathetic.

We thus see that none of the experiments which have been performed warrant the conclusion that belladonna causes dilatation of the pupil by paralyzing the circular fibres of the iris, which are under the government of the nerve of the third pair.

And that if the experiments do not prove that belladonna acts by exciting the radiating fibres of the iris, which are under the influence of the sympathetic, they certainly do not invalidate the other evidence in favour of that view, which I have adduced.

An opinion, many years ago expressed by Professor Weber, of Leipsig, that belladonna acts by paralyzing the circular fibres, and at the same time exciting the radiating ones, has lately been revived by Biffi, Cramer and De Ruiter. This, it will be observed, is merely saying that the two sets of fibres are antagonists, and that when the one set is excited the other is relaxed. This opinion, therefore, virtually is, that belladonna excites to contraction the radiating fibres of the iris.

I now come to the question, as to how the influence of belladonna is transmitted to the iris.

This is a question, you will observe, quite distinct from that which has been occupying us, and may be investigated, whatever opinion is held in regard to the particular fibres of the iris acted on, and the mode in which they are acted on by the belladonna.

That belladonna is absorbed when taken into the stomach, when applied freely to the conjunctiva or to an abrasion of the skin, and by that means comes to act on the system generally, and amongst other parts, the pupils of both eyes, there can be no doubt.

But when applied in small quantity to one eye, and when its action is confined to the pupil of that eye, how is the influence of the belladonna transmitted—by absorption, or by reflex nervous action?

Professor Budge says, that he has divided the optic nerve, together with all the ciliary nerves as they enter the eyeball, and yet found atropine still distinctly dilate the pupil.

In such a case the atropine must have been absorbed, and brought so as to act on the extremities of those nerves of the iris which are under the influence of belladonna.

Though this may be, I think it not unreasonable to ascribe the ordinary effect of belladonna on the pupil to reflex nervous action, in some such manner as we ascribe the effect of variations of light on the pupil to reflex nervous action operating from the retina through the optic nerve to the corpora quadrigemina, and thence through the third nerve to the iris; or the effect of stimulants applied to the conjunctiva in contracting the pupil, to reflex nervous action from the fifth to the third nerve, or in causing spasmodic closure of the eyelids to reflex action from the fifth to the seventh nerve.

I would now beg your attention to the eye which I extirpated last Wednesday.

You will observe that the cause of the great protrusion of the eyeball was this morbid enlargement of the optic nerve from encephaloid disease.

The eyeball itself, though affected, you see is not enlarged.

On laying open the sclerotica, there was seen grumous blood between it and the choroid. This being removed, the annulus albidus was observed to be much enlarged, and the seat of an independent development of encephaloid. On dividing the choroid, the shreddy remains of the degenerated retina were seen adhering to it in the situation of the entrance of the optic nerve. No marked continuity between the disease within, and that in the optic nerve outside the eyeball existed. There was no longer any vitreous humour, its place being occupied by the encroachment inwards of the enlarged and diseased annulus albidus.

Anteriorly the remains of the iris, with lymph blocking up the pupil, were seen

The cornea was ulcerated through in the middle, and the lens gone. The history of the case, as narrated by the Surgeon who sent the patient to me, was as follows:—

The boy H. P., aged 10, about two years ago fell from a swing, by which the eye was so injured that sight was lost. The whole anterior chamber was found on examination full of blood, so as to prevent any exploration of the bottom of the eye.

About the middle of last summer the boy began to suffer frequently from sudden attacks of violent pain in the eye and head, accompanied by severe vomiting. At this time there was no apparent difference in the appearance of the eye itself, more than had existed since the accident, except that the vessels of the conjunctiva were injected, and an accumulation of blood and pus was seen in the anterior chamber.

Six weeks ago the eye was found enlarged and protruding from the orbit, but not to so great a degree as when the boy was brought to the hospital. Up to that time, the protrusion had been going on increasing, with great pain in the orbit and head, as well as tenderness in the eye itself. Loss of appetite and great depression accompanied this state of things.

Encephaloid disease of the eye occurs principally in early childhood, originating sometimes within the eyeball, sometimes in the optic nerve outside the eyeball, sometimes, as in this case, in both. As a rule, the eye ought not to be extirpated on account of encephaloid, for the operation has been too generally unsuccessful to allow us to hope for recovery being thereby effected. But have there not been cases of recovery after extirpation? you will ask. There are alleged cases on record, but we have every reason to believe that they were not cases of true encephaloid, but merely of non-malignant tumour, which left alone would have turned out so far well as not to have gone on to the destruction of the patient.

There is in general no certain means of determining the malignant or non-malignant nature of the case *à priori*.

But this much we can say, to guide our practice at the commencement of the disease, that, if it be malignant, it is of no use to operate; if non-malignant, it is unnecessary.

In an advanced stage, however, we may, as in the present case, remove the diseased mass from the orbit, in the hope, in the first instance, of relieving the sufferings of the patient, occasioned by the distension of the orbit and protrusion of the eyeball, even should the disease prove, as it has proved to be, encephaloid; but in the further hope that, if non-malignant, the operation might lead to recovery.

In non-malignant cases, though exophthalmia sometimes takes place, the affected eye, it is to be observed, more commonly becomes atrophic. In a boy, whom I have had under notice for about two years, the eyeball, which presented all the symptoms of true encephaloid disease originating in the retina, from being enlarged, has now shrunk below the natural size. I am, therefore, in hopes that the disease may prove non-malignant.

ORIGINAL COMMUNICATIONS.

OBSERVATIONS

ON THE

MEDICAL HISTORY OF THE EARLY KINGS OF ENGLAND.

By G. CHAPLIN CHILD, M.D.

(Continued from page 4.)

WILLIAM THE CONQUEROR. 1066—1087.

William the Conqueror was the son of that cruel Duke of Normandy now familiarly known as Robert the Devil, and of his mistress, Arlotta, a tanner's daughter in Falaise. He inherited both a good constitution and a robust frame. The old chroniclers relate that no sooner was he born than "he laid hold of the straw or rushes with which the apartment was strewed, and held them so fast that his fist had to be unclenched before he would let them go." This we may, perhaps, interpret as a proof of baby-vigour; but in those days much more was made out of it, as it was considered a sure sign that he would "not only hold his own, but rasp some-

what of the possessions of others." Thus even at his birth the Conqueror was foreshadowed.

William is described as tall and well-proportioned in his younger days, active and energetic in his habits, and so strong that none except himself could bend his bow. Some historians allege that he was "fond of feasting;" he was devoted to the chase, often retiring from London to his hunting-ground at Barking or Berkhamstead, before he had carved his New Forest out of Hampshire. According to Fitz-Stephen, who wrote about a hundred years after this, London was then surrounded by a large forest, "in the corners whereof lurked bucks and does, wild boars, and bulls." William's general health was good; indeed, it is remarked by several old historians that his first illness was his last.

Eight years before his death he was wounded by his rebellious son Robert. Father and son met without recognising each other in a *mêlée* in Normandy, when the former was pierced through the arm with a lance, and borne to the ground. The king's constitution being still sound, recovery followed in due time; and the wound left no other effect behind it than an implacable resentment against the son who had caused it.

Towards the end of his life the Conqueror became "much distempered in body," and very corpulent. William of Malmsbury terms it "*corpulentia immensa*;" he is "*pinguis-simus rex*" in the words of Orderic. In 1087, while carrying on war against Philip of France, he was so oppressed with obesity that he took advantage of a short truce to go through a course of physic, in the hope of somewhat reducing the size of his "big bellie." His opponent Philip made his court merry over this event, giving out with more wit than wisdom that his cousin was lying-in, and, with mock anxiety, asking travellers from Rouen if the king had yet been delivered. It was then customary to burn candles at the churching of women; so Philip pretended to be dismayed at the number of lights he would have to provide at Notre Dame, adequately to celebrate so auspicious an event. William, on his part, entered grimly into the joke, and told Philip not to be afraid of the expense, for, when the churching-day came round, he would himself provide plenty of lights, and would kindle up a kind of blaze which his enemies would by no means admire.

This joke ended the truce, and forthwith the Conqueror set out to carry fire and sword into the enemy's country. In the last week of July he laid siege to Mantes upon the Seine. He burnt the town, sparing neither the "fayre church of Our Ladye," nor those holy inmates who, with martyr-spirit, scorned to forsake the house of God at such a moment. William rode to and fro on horseback, actively superintending the execution of his orders. And now occurred the accident which cost him his life; for, from a sudden movement of his horse, the king was violently jerked against the pommel of the saddle and severely injured. He was carried back to Rouen, and expired there about five weeks afterwards.

The above is briefly the usual narrative of the Conqueror's death, and I shall now proceed to give such details connected with it as I have been able to find.

At the time of the accident William's constitution had become impaired from many causes. He had lived a "wearing" life, ever restless and unquiet. When reviewing his past career on his deathbed he says, "Since I was eight years old I have always borne the weight of arms." At one time he was at war with France, at another with Scotland, or with the Welsh or Danes; now fighting against the rebellious in his new kingdom, or against his turbulent Norman barons; add to this his struggles with his own sons, who were ever plotting and rebelling, and we must admit that his mind was burthened with cares enough to undermine an originally strong constitution.

Shortly before the accident his strength had been reduced. The *Chronique de Normandie*, affirms that he had been seriously ill, "*il advint, comme Dieu vout, que le Roi et Duc Guillaume enchut en maladie, et y fut longuement.*" On the other hand, most historians say that he was placed under treatment solely on account of his obesity. This condition appears to have been more generally regarded as a disease in ancient times than it is with us; and in works on the practice of physic it had its special chapter, instead of being, as now, merely incidentally mentioned. What the treatment was which the king underwent we cannot now tell; but, as his physicians were learned men, we may infer it was founded on Greek and Arab principles, and consisted of such remedies as warm baths, acids, especially vinegar, and cathartics.

It likewise appears that although the king, goaded on by anger and revenge, was able to take an active part against the city, he was at the moment actually within the grip of a new illness. The season was the last week in July, and the king had been campaigning on the marshy banks of the Seine. Orderic tells us, "he fell sick from excessive heat and great fatigue." Another writer blames "the inequality of the autumnal heats." So likewise Holinshead: "In the heat the king took such a sickness, which was likewise aggravated by a fall of a horse, because he was not able to travel on foot by reason of his illness."

Under these circumstances, then, the king met with his accident; but there is much difference among historians as to how it actually happened. Some say his horse fell with him; and, in certain recent histories, William is merely said to have been killed by a fall from his horse. But most chroniclers affirm that the accident happened either while William was leaping across a ditch, or because his horse, having put its foot upon a burning ember near the fire, suddenly swerved, and forced the king violently against the pommel of the saddle.

The expressions used to describe the accident vary also. Roger of Wendover, one of the most esteemed historians of that period, calls it "an internal rupture." William of Malmesbury says, "interranea sessoris diruperit." Matthew Paris uses nearly the same words. Baker has, "he took a rupture in his inward parts." Henry de Knyghton says, "interranea pinguis ventris ejus sunt interrupta." Speed, "he burst the inward rim of his belly." In the *Historia Normannorum*, his illness is ascribed to liquefaction of the fat of the intestines from excitement and exertion. But in reference to these expressions it may be remarked, that the subsequent history of the case precludes the idea of any internal rupture. Such accidents reveal themselves from the first by the severest symptoms, and in such a constitution as William then had, would probably have proved fatal in a day or two. Some modern authors, perhaps from ignorance of the distinctions made by surgeons in such cases, affirm that the accident was simply "a rupture." But again, the symptoms were by no means those of a fatal hernia suddenly produced. Indeed, from the silence with which the accident is passed over by Orderic, Gervasius, Florence of Worcester, and the Saxon Chronicle, although the first more especially gives many details of William's last illness, and all wrote near the period when it happened, we may infer that it was probably, after all, a bruise of no great severity, but that it ran a fatal course from the circumstances in which the broken-down king was then placed.

The Saxon Chronicle thus quaintly describes the king's illness as breaking out after the burning of Mantes:—"His ita factis, Rex Gul. reversus est in Normanniam. Luctuosum quiddam is fecit, et magis luctuosum ei contigit. Quomodo magis luctuosum? Morbo eorruptus est qui eum acriter afflictabat. Quid plura? aspera mors eum abstulit."

After the accident the king was never able to mount horse again, and was carried back to Rouen in a litter. Roger of Hoveden states the significant fact, that it was only during this journey that the pain came on severely: "sed in ipso reditu dirus viscorum dolor eum apprehendit," and there was also fever. Arrived in Rouen, we are told that the pain in the bowels gradually increased. Orderic says, he was tormented with excruciating pain in his intestines; Roger de Hoveden and Florence of Worcester affirm that the pain was "excessive" or "dreadful," as also was the debility. The Physicians, especially from inspection of the urine, foretold a fatal termination, and the king himself felt that his end was approaching. He was attended by Gilbert, Bishop of Lisieux, and Gontard, Abbot of Jumièges, his Physicians in ordinary, who were accounted "the most skilful of the faculty."

The traveller in Rouen who has enjoyed the panorama from the roof of St. Ouen may have observed a church at the extreme end of the faubourg, stretching towards the west. The intermediate space is now covered by a wilderness of streets, intersected midway by the planted boulevards of the old city. But in those days all beyond the boulevards was green fields, among which lay the church of St. Gervais, with its adjacent priory, sheltered from the north winds by the pretty slopes of the Cauchoise. To this spot the Conqueror now caused himself to be carried, for the sake of quiet and religious preparation. William retained his faculties to the last, and spoke much and often to those around him, both on public

and on private affairs. He was "*incontinent en parlant jusqu'à la mort.*" Orderic gives at great length these death-bed speeches, which were "sometimes interrupted by penitential tears." Remorse, and more especially his destruction of the church of Our Fayre Ladye at Mantes, weighed heavily on his conscience, and, like other great sinners both before and since, he tried to purchase peace for his soul by gifts to the church, and by forgiving of those enemies whom he could no longer oppress.

With a devout prayer to "The Virgin and all the Saints in Paradise" on his lips, the Conqueror died in the 60th year of his age, between five and six weeks after the accident. Orderic, who of all the chroniclers gives perhaps the most minute account of his illness, says that the death at last was rather sudden and unexpected: "He had lain the whole night through quiet and without a moan, so that his physicians, when they found he was dead, became like men who had lost their wits." The breath was no sooner out of his body than the scene usually enacted on the death of a Norman king followed almost as a matter of course; his attendants, "like true kytes, preying while anything was to be had." They stole and plundered everything they could lay their hands on, and, leaving the body naked on the floor, scrambled off to make good their position with the new king; nothing was treated with less respect in those days than dead majesty. After various untoward mishaps, William at length found a grave in Caen. At the burial, attention is once more drawn to the corpulentia immensa, as the "big bellie" could not be squeezed into the sarcophagus until great violence had been used.

What opinion, then, as to the cause of death are we to form from the above details, collected from most of the original sources of information? In some narratives, as we have seen, the chief stress is laid on the exposure, the season of the year, and the subsequent fever; in others, the bruise is more immediately regarded as the cause of death: no doubt both causes were combined, and mutually aggravated each other. There is, however, nothing to show that the fever ever attained great intensity; the king never was delirious, and lived nearly six weeks from the date of its invasion. On the other hand, the bruise, happening to the king when his constitution was broken down and after great fatigue, exposure and excitement, ran, as might have been expected, a most unfavourable course, bringing on abdominal inflammation, probably of a low type, under which the Conqueror at length sunk.

NOTE.—In preparing these Essays I have consulted the following authors:—Ingulph, Orderic Vitalis, Simon Dunelmensis, William of Malmesbury, Mathew Paris, Roger of Wendover, Florence of Worcester, Henry of Huntingdon, Roger de Hoveden, Gisburne, Mathew of Westminster, Gervasius, Thomas Walsingham, Geraldus Cambrensis, Waverley Annals, Anglo-Saxon Chronicle, Bede, Chronique de Normandie, William of Jumièges, Montfaucon, Knyghton, Radulfo de Diceto, John Brompton, Holinshead, Grafton, Dugdale, Sprengel, Aikin.

Speed, Baker, Brady, Carte, Lyttleton, Rapin, Hume, Lingard, Pictorial History of England, etc.

ON THE VAPOUR OF AMYLENE.

By JOHN SNOW, M.D.

(Continued from page 62.)

It follows from the experiments above alluded to that the patient must breathe air containing not less than fifteen per cent. of vapour of amylene, in order to reach the third degree of narcotism, or that condition in which the pupils are usually contracted and inclined upwards, consciousness and voluntary motion being entirely suspended, but the muscular system not necessarily relaxed. As 100 minims of amylene produce 86·7 cubic inches of vapour, and as the patient breathes 400 cubic inches of air a minute, and frequently more, the amylene is consumed at the rate of rather more than a fluid drachm in the minute, and in this way insensibility is caused in three minutes, or rather less. If the vapour is not inhaled in a sufficient volume the patient will not become insensible by continuing the inhalation for however long a time, consequently the quantity of vapour must be increased, or it will not succeed.

The amount of vapour of amylene that the air will take up at ordinary temperature is far more than enough to cause insensibility, even when but partially saturated. When fully saturated the quantity of vapour at different temperatures is nearly the same as in the case of sulphuric ether, a table of which I laid before the Society in 1847. At the following temperatures I find that air, when saturated with vapour of amylene, contains the subjoined quantities in each 100 cubic inches, when the barometric pressure is 30 inches:—

53° Fah.	38.6 cubic inches.
55° "	40.0 " "
57° "	42.5 " "
58° "	43.7 " "
59° "	45.0 " "
60° "	46.5 " "
61° "	47.8 " "

In the ordinary process of inhalation, however, it is not easy to get the air even half saturated with vapour, owing chiefly to the cold produced by the evaporation of the amylene. When a piece of blotting-paper is wetted with amylene it usually happens that the absorption of caloric by the evaporation causes, first, a deposition of the moisture of the atmosphere, and then the freezing of the water, so as to occasion the appearance of hoar frost on the paper. This extreme cold would, of course, limit the evaporation very much, but it is counteracted in a great measure by the bath of cold water which surrounds my ordinary chloroform inhaler, the water supplying the caloric which is abstracted by the vapour of amylene; and since using this latter agent I have had the apparatus somewhat enlarged, in order to afford a larger surface of bibulous paper, and a somewhat greater quantity of water; by this means I find that I have the power to exhibit a sufficient volume of vapour, even in this weather, when the temperature of the water, although kept in a dwelling-room, is often as low as 50° (a).

After making several experiments on small animals with amylene, and inhaling small quantities of it myself, I first administered it in King's College Hospital, on the 10th of November last, to two boys about 14 years old, previous to Mr. Samuel Cartwright extracting some teeth. I had but a few drachms, and being very sparing of its use, it did not entirely remove consciousness in either case, and the pain was not altogether prevented; the effects, however, as far as they extended, were so favourable as to encourage a further trial, which was made in the same institution on December 4.

On this occasion I exhibited the amylene to four patients—two men, a young woman, and a girl of 10 years old; it occasioned complete unconsciousness and absence of pain in each case. Each of the men inhaled for three minutes, and used half a fluid ounce of amylene; they each had a tooth extracted by Mr. Cartwright, and awoke and left feeling quite well, just six minutes after entering the room. The two females inhaled for four minutes; the elder one, who was not in good health, complained of dizziness afterwards, which, however, passed off in about ten minutes. On December 11, I exhibited the amylene again in five more cases of tooth-drawing in King's College Hospital, with very similar results to those obtained in the previous cases; and on December 13, I administered it in some more important operations.

In one case Mr. Fergusson performed an operation for fungus of the testicle; Mr. Bowman removed some diseased glands from the groin; and there were two cases of tenotomy, in one of which forcible extension of the knee was made. (b)

On December 27, I exhibited the amylene again to a girl three years and a half old, a patient of Mr. Fergusson, who had inhaled it on the 13th; the effects were the same; she inhaled for two minutes before the operation was commenced; there was no sign of pain, and she awoke almost the moment the operation, which consisted in the division of some additional tendons near the foot, was concluded. On January 3rd, I administered amylene again in three operations performed by Mr. Fergusson. One of these was an operation for the completion of a new nose. There was a little delay, owing to the difficulty of fitting the face-piece to the new organ; and the man inhaled for six minutes before the operation was commenced, but half this time he was making no progress towards anæsthesia. There was much less rigidity and struggling than when he inhaled chloroform a few weeks previ-

ously. After the operation was commenced the vapour was exhibited on a sponge as well as circumstances would permit, and, although the patient flinched a little once or twice, the anæsthesia was as complete as is usual in such cases; for there is generally some difficulty in keeping up the insensibility during operations on the face. At one part of the operation the man entered into a rambling conversation, which had no connexion with the use of the knife, of which he seemed entirely unconscious.

On the 7th inst., I gave the amylene whilst Mr. Henry Lee performed amputation above the knee in a girl who underwent excision of the knee-joint a few weeks ago. She had suffered from secondary abscess, was extremely weak, and had a pulse of 150 in the minute. The vapour was exhibited to the patient in bed, before her removal to the operating table. There was an examination of the knee before the operation, and the anæsthesia was kept up till the dressings were applied, which was twenty-five minutes from its commencement, and nearly three fluid ounces of amylene were used. She went through the operation extremely well. There was no sign of pain, and the pulse remained the same throughout.

I have again given the amylene to-day in three operations performed by Mr. Fergusson in the Hospital. The first was an operation by ligatures on a large nævus of the lip in a young man; the next was lithotomy in a child about three years old; and the third was the removal of a large melanotic tumour from the groin of a middle-aged man. The patients were each brought under the influence of the vapour in from two to three minutes. The prevention of pain was complete in all, and the two men were partially conscious during a great part of the operation, the last patient repeating a number of verses with perfect accuracy while the vessels were being tied. These make twenty-one operations in which I have administered amylene.

In the use of amylene absence of pain has been obtained with less profound coma than usually accompanies the employment of chloroform and ether. There are some cases, indeed, in which the minor parts of an operation, under these latter agents, may be performed without pain while the patient is in a semi-conscious state, or even altogether conscious, but they form an exception; while in the use of amylene the patient has very often been half-conscious during the operation. In operations under chloroform the patients usually indicate the necessity of repeating the inhalation by a tendency to flinch or cry, without showing any signs of consciousness; but in the use of amylene they have more frequently begun to look about and to speak before showing any sign of pain. There are some patients who will not lie still under the Surgeon's knife while chloroform is being used, unless its effects are carried so far that the breathing is on the borders of being stertorous, but I have not yet met with any such case in using amylene.

I made the observation early in the practice of inhalation for the prevention of pain, that the anæsthesia, or loss of common sensibility, does not always keep pace with the amount of narcotism of the nervous centres, as evinced by coma, etc., even in the same case; and I offered an explanation of the circumstance to this Society (c) in the fact that narcotic vapours act on the nerves throughout the body, as well as on the brain; and there were certain circumstances connected with the circulation, why at one time, or in one case, the brain, and at another time, or in another case, the nerves should be most influenced. I have not at present, however, arrived at any conclusion as to the reason why amylene prevents pain with apparently a less amount of coma than ether and chloroform.

The pulse is generally increased in frequency and force during the inhalation of amylene to a greater extent than happens with chloroform. There has generally been an increased redness of the face during the first part of the inhalation, and in one case there was profuse sweating, a phenomenon also met with, now and then, under the influence of chloroform.

The respiration is very often accelerated during the inhalation of amylene, about as often, I think, as with ether, and more frequently than with chloroform. Dr. Sibson and I found that the breathing was greatly accelerated by these latter agents in a dog, after he had divided both the pneumo-

(a) The inhaler is made by Matthews, Portugal-street.

(b) See Med. Times and Gazette, Dec. 20, p. 624.

(c) See Medical Gazette, 1848, Vol. II.

gastric nerves, so that the phenomenon is not occasioned by the local effect of the vapour in the lungs.

There has not been much increase of saliva from the use of amylene, and I have not yet met with the profuse salivation which is often troublesome in the employment of chloroform and ether. What is of most importance of all, however, if it should continue, is, that there has been no sickness in any case, nor any of the depression which so often precedes and accompanies the sickness from chloroform and ether.

There has been hardly any struggling or rigidity in any of the patients, although several of them being robust men, a good deal of both might have been expected before complete insensibility, if chloroform had been the agent employed.

A point of great interest connected with amylene is its probable safety or danger. While I cannot venture to predict for it the absolute safety which seems to attend sulphuric ether under all circumstances, I confidently trust that it will be perfectly safe with careful management. Although the use of ether was commenced when there was no experience in the production of insensibility by inhalation, yet there seems to have been no fatal accident from its effects during its very extensive employment. It has, indeed, been alleged that it has proved fatal in two instances; but in one of these cases, which occurred at the Hôtel Dieu of Auxerre in July, 1847, the patient probably died from want of air, owing to a defective apparatus; the inhalation was persevered in for ten minutes, although there were alarming symptoms the greater part of the time. The other case happened at the Hôtel Dieu of Lyons, on August 26th, 1852. M. Barrier was removing the superior maxilla, affected with osteo-sarcoma, in a woman in a bad state of health, who was seated in an easy chair. She died of sudden syncope in the middle of the operation, a result which occurred in a similar operation by an eminent Surgeon in this metropolis before ether was introduced. From the history of the inhalation and of the symptoms, I feel sure that the loss of blood was the cause of death, and not the ether. There have, however, been several sudden and fatal accidents in the use of chloroform; and although they are extremely few in comparison with the multitude of cases in which this agent has been used, they are, nevertheless, much to be regretted.

I have on former occasions explained the reasons why accidents have happened in the use of chloroform, and not in the use of sulphuric ether, and I will now very briefly recapitulate these reasons. The quantity of ether which a patient requires to inhale in order to be made insensible occupies about 400 cubic inches in the form of vapour, and necessarily mixes in the process of inhalation with not less than 800 cubic inches of air, and makes a volume of at least 1200 cubic inches, which can only be inhaled by a number of inspirations; and no great proportion of the whole quantity can ever be in the lungs at one time. The quantity of chloroform, on the other hand, which when inhaled will cause insensibility in the adult is only about 36 minims, which occupies only a little more than a pint in the form of vapour, and this, if precautions be not taken to prevent it, may be mixed in the process of inhalation with less than a gallon of air, which may all be inhaled in a few inspirations, and a great proportion of it might be in the lungs at one time. For the above reasons ether cannot produce its effects except gradually, whilst chloroform is capable of acting almost instantaneously, when the point of safety may easily be overstepped. Chloroform, ether, and similar agents have the power, when pushed to excess, not only of arresting the respiratory movements, but of stopping the action of the heart by their direct physiological effects. It takes, however, a larger quantity to paralyse the heart than to suspend the action of the respiratory muscles; and as ether can only enter the circulation by degrees in the process of inhalation, it is necessary to open the pericardium and blow the vapour on the surface of the heart, or to perform some other manœuvre in order to show the direct action on the heart. When animals are made to breathe ether till they die, the action of the heart continues after the ordinary breathing has ceased; and, at the moment when the action of the heart is stopping from over distension, there are generally two or three deep gasping inspirations, which set about the recovery of the creatures, unless they are made to breathe more ether during these gasps. These are also the phenomena which occur in killing animals with chloroform, if care be taken to have the vapour so diluted that the air they breathe does not contain more than five per cent. of it. But when the air

breathed contains eight or ten per cent. of vapour of chloroform it acts so quickly, and is absorbed in such quantity into the blood as it passes through the lungs, that not only are the brain and nerves of respiration narcotised, but also the nerves of the heart, and the animal is beyond recovery. The above facts explain, in my opinion, both the great safety of ether, under all ordinary circumstances, and the great care required with chloroform to ensure its safety.

The quantity of amylene which the patient requires to inhale to cause insensibility is intermediate, as stated above, between that of chloroform and that of ether, and so also is the amount of air which must be mixed with it; and it is my opinion that the cold produced during its evaporation would, in all the ordinary methods of inhalation, prevent the air from taking up a quantity of the vapour which would be dangerous.

The relative advantages and disadvantages of amylene may, as nearly as I can judge, be summed up as follow:—In regard to its odour, it is more objectionable than chloroform, but much less so than sulphuric ether. The odour of any volatile substance is, however, no longer perceived after a patient begins to inhale. In respect to its pungency, it has a great advantage over both ether and chloroform, being much less pungent than either of them. Thus, whilst the patient, especially if a female, often complains of a choking feeling and want of breath in commencing to inhale chloroform, and two or three minutes are lost before the vapour can be inhaled in any useful quantity, she can begin to inhale the amylene of full strength within half a minute from commencing, and the operation may generally be begun within three minutes. In the amount which suffices to induce insensibility it is intermediate between chloroform and ether, chloroform having the advantage. Amylene has an advantage in preventing pain with a less profound stupor than that occasioned by the other agents, and in the ready waking and recovery of the patient it has an advantage over chloroform, and a still greater advantage over ether. Its probable safety I have spoken of; and the greatest advantage of all, if it should continue to be met with in all cases, is the absence of sickness from its use. The almost entire absence of struggling and rigidity may also be mentioned as an advantage of amylene over ether and chloroform.

I do not venture to predict that amylene will supersede the use of other agents, but I trust that the subject in its present stage is sufficiently interesting to warrant me in bringing it before the notice of the Profession, and I consider that the results obtained with the amylene have been so satisfactory as to encourage the further use of it. It would probably become cheap if there should be a demand for it.

Sackville-street.

TWO CASES OF SLOUGHING AND PERFORATION OF THE APPENDIX VERMIFORMIS.

WITH REMARKS.

By THOMAS EDWARD AMYOT, M.R.C.S., L.A.C.

SEVERAL cases of perforation of the cœcal appendix are on record, the mischief having generally been owing to inflammation and sloughing, caused by the impaction of some foreign body, as for instance, a cherry-stone, a pin, a tooth, a bristle from a brush, or a small portion of hardened fœces. (a) It appears to me, however, that sufficient attention has not been paid to the physiology and pathology of this little organ, and I therefore venture to bring forward the two following cases, which have very recently occurred in my practice:—

Case 1.—On July 26, 1856, I was called, at half-past 2 p.m., to attend the son of the schoolmaster at Seale, a somewhat delicate boy, aged 9 years. He had just returned in a fly from a visit to his aunt, who resides about six miles distant. He had suffered the most agonizing pain on being carried upstairs from the carriage, and had directly afterwards vomited a quantity of dark green or blackish fluid, very offensive to the smell.

(a) See Copland's Dictionary—article, "Cœcum;" Medical Times and Gazette, April 7, 1855; Association Journal 1851, p. 240; Rokitsansky (Syd. Soc.), vol. ii. p. 194.

I found him in bed, pale, clammy, and deadlly cold (although complaining of great heat, both of body and extremities); the tongue was neither dry nor furred, but very cold; the pulse rapid and scarcely perceptible, the abdomen hard, tumid, and tender. He did not now appear to suffer any great pain, and the expression of his features was quite devoid of that anxiety usually so marked in severe lesions of the intestine. There was no hernia. The bowel had not acted for seven days, in spite of purgatives and saline injections, which had been freely administered before his return. I suspected intussusception or mechanical obstruction of some kind, and gave a large castor-oil enema, calomel with antimonial powder in repeated doses, and small quantities of brandy-and-water. At 8 p.m., finding no result, I threw up a quantity of decoction of aloes with Epsom salts; but it was immediately returned without motion. The patient was evidently sinking fast, and died at midnight, being perfectly conscious nearly to the last moment.

It is now worth while to note what had been the previous history of this case. The boy was considered delicate, but had never had any severe illness, and the progress of the symptoms, which, as I have just said, terminated in death, appears to have been extremely insidious. Three weeks previously he had begged his brothers not to make him laugh, as it gave him pain in the stomach to do so, and on Saturday last (eight days before death) he went on a pleasure-visit to his aunt; that evening he wished to go to bed early, apparently not feeling quite well, but not complaining of any particular pain. On Sunday he was poorly, and the bowels acted for the last time. On Monday, much the same, and well enough to go for a trip to Yarmouth, but felt ill in the afternoon. On Tuesday he vomited much yellow bile, and retched violently. On the three following days he retched frequently, and complained occasionally of severe pain in the hypochondriac and left iliac region. The symptoms of Saturday, to the hour of decease, have already been given.

Autopsy, thirty-six hours after death.—Body rather spare, but not ill-made; lips almost black; decomposition advancing rapidly; abdomen tense, and much discoloured, particularly in the course of the recti muscles. On opening the body, a large quantity of excessively fetid gas escaped, and a purulent-looking fluid (probably gruel and pus mixed) was seen in abundance among the pelvic viscera. The peritoneal surface of the ileum was much injected. *Stomach* very small, and containing only about an ounce and a-half of blackish fluid. *Duodenum* healthy; jejunum rather dark, and loaded with blood on its peritoneal surface. *Ileum* healthy internally, and containing only a little semi-fluid, bile-stained matter. *Ileocecal* valve healthy. *Cæcum*, to all appearance, healthy without and within; orifice of appendix healthy. (b) *Appendix* itself thickened, and club-shaped towards its end, about three-quarters of an inch from which was a large, sloughy, ragged perforation, dividing the process across, to within about one-third of its diameter. Tube empty. *Colon and Rectum* healthy. *Mesenteric Glands* considerably enlarged. *Liver, Kidneys, and Bladder*, healthy. Gall-bladder distended with bile. *Viscera of Chest* natural. Ventricles of heart containing about three drachms of semi-fluid blood.

Case 2.—October 17th, 1856, summoned at three o'clock p.m. to Mr. S. H., aged 18, assistant at a bookseller's shop,—a young man of fresh complexion and healthy appearance, and of remarkably steady habits. I found him suffering from sickness and pain, more or less intense but constant, in the lower part of the abdomen. Tongue pretty clean and moist; pulse upwards of 120, thready; skin warm and natural; urine healthy; great tenderness on pressure in right iliac fossa; abdomen generally hard, distended, and somewhat tender; no hernia. The bowel, according to the patient's account, had acted on the previous day, and was not habitually confined. The matter vomited was dark green and intensely bitter.

Of the previous history the following is nearly all I could glean. He had been at times subject to pain after food, and sometimes became pale and apparently uneasy during his meals. He has also had, now and then, a kind of hysterical attack.

The present attack commenced on Wednesday, six days before death, with rigors, and on Thursday he had severe

pain, and took some tincture of rhubarb without relief. On Friday I first saw him, and ordered a free dose of calomel, with henbane, and an aperient draught an hour afterwards. Turpentine stoups were also applied to the body.

8 a.m., Saturday.—Worse; the pill and draught had no effect; night restless, pain increased; pulse 130, thready; much tenderness and thirst. V. s. ad $\frac{3}{4}$ xvj., hirudines x., pil. cal. e. opio et antim. 2a quâque horâ. The bleeding and leeches gave very decided relief to the pain, but did not affect the pulse or cause faintness. Later in the day, a large dose of calomel and colocynth was given, and an enema of Epsom salts, dissolved in three pints of gruel, which passed up with ease, but did not return. From this time he suffered but little pain, but was troubled by retching and cructations, and a rising in the mouth of dark coffee-ground fluid. During the Saturday night, castor-oil and turpentine and colocynth, dissolved in compound infusion of senna, were injected, and repeated large doses of castor and croton-oil given by mouth,—all of which were retained without effect of any kind. A few doses of morphia were given towards morning, and some refreshing sleep was the result.

Sunday.—In addition to other ill-symptoms, hiccough has come on, but is immediately stopped by the inhalation of a few drops of chloroform, to the great relief of the patient. During the forenoon, a quantity of dark fluid passed from the bowel, and he vomited much of the coffee-ground liquid (c); it had no stercoraceous odour. The symptoms, however, were in no way improved, and continued with little variation through the Monday. Death took place after another copious black vomit and a profuse cold sweat at three a.m., on Tuesday morning, October 21.

I ought to have observed that, throughout this illness, the countenance has been singularly quiet and composed, and quite devoid of all pinched and anxious expression.

Autopsy, thirty hours after death.—Body well formed and fat; still quite warm at the upper parts of the thighs and abdomen. No great discoloration of lips or elsewhere. *Chest* well developed, and its organs sound. *Abdomen.*—On opening the peritoneum a quantity of offensive gas, and what appeared to be bile-stained mucus, escaped. Intestines greatly distended with air, pushing up the diaphragm, and completely hiding the stomach, which was collapsed, healthy, singularly small, and contained only about half-an-ounce of yellow mucus. Upper part of small intestine healthy, but the last twelve inches of the ileum much diseased, the upper five showing recent inflammation of mucous surface, the next three a singular construction where the tube would only admit the little finger, and the lower four marks of inflammation less pronounced. The mucous membrane of the constricted portion was pale; the peritoneal coat of the whole twelve inches much inflamed and shreddy. *Cæcum* pale and apparently healthy on its mucous surface, shreddy and inflamed externally. *Appendix vermiformis* dark, gangrenous, double its natural size, and perforated by several minute ulcers; it was, moreover, completely detached from the cæcum, separation having taken place close to the gut, and was found adhering by strong bands to the peritoneal surface of a fold of the ileum. It contained no foreign body. Colon and rectum healthy. The gall-bladder distended with bile. Nothing worthy of remark in the other organs.

It may savour of presumption for one who has little time and few facilities for physiological research to advance an opinion on the possible use of this little appendix; but as the question is an open one, and as I can find hardly a guess at its solution in any work to which I have access, I will even venture.

The cæcum (both from its form and position) is most prone to suffer from overloading with fecal masses. The pressure of such masses on its interior may possibly prevent its proper secretion, and injurious contact of the two surfaces might be the consequence.

Here I would suggest the appendix is called into play; its narrow cavity is not liable, in the healthy state, to pressure, as is that of the bowel, and it is placed there to pour its fluid between the cæcal surface and its contents, when occasion may require, so as to loosen and lubricate the latter, and to facilitate the passage along the bowel.

With a few exceptions, this appendage is peculiar to man

(b) In four cases of Gangrene of the Appendix seen by Dr. Copland, "the cæcum was found inflamed in its peritoneal surface in three; in the fourth, inflammation was observed also in its inner surface."—*Copland's Dict., Article "Cæcum."*

(c) What is the nature of this coffee-ground fluid, so commonly vomited in cases of intestinal lesion?

and the Simiæ. (d) Is it that the erect or occasionally erect position in ourselves and our ugly neighbours, and the consequently vertical direction of the ascending colon, renders the cœca more exposed to fœcal distension than in other animals, and the good offices of this little body the more necessary?

NOTE.—Since the above was written I have found an opinion of the lubricating use of the appendix in the works of the elder Monro (4to, 1781, page 627), and probably it can be met with elsewhere. I do not, however, regret having resuscitated the opinion, which has either been forgotten, or forsaken for some good reason of which I am ignorant. One of the first physiologists of the present day considers the appendix as merely rudimentary of the true cœcum of the lower animals; and an excellent anatomical lecturer in London is wont to say that its only use, as far as he knows, is to catch cherry-stones!

November 11, 1856.

T. AMYOT.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

SERIES ILLUSTRATING THE CONNEXION
BETWEEN
BRONZED SKIN AND DISEASES OF THE
SUPRA-RENAL CAPSULES.

GUY'S HOSPITAL.

BRONZED SKIN WITH CACHEXIA—DEATH—
AUTOPSY.

(Under the care of Dr. BARLOW.)

THE following narrative is condensed from the very full notes kept by Mr. Galton, the clinical clerk of the case:—

M. A. McCartney, aged 24, a single woman, by occupation a cook, residing at Deptford, but a native of Ireland, was admitted into Guy's Hospital on October 22, 1856.

History, previous diseases, etc.—There is a family predisposition to phthisis. None of her relations have, as far as she knows, had any discoloration of the skin; and they have, for the most part, fair complexions. She has never had ague, nor is there any reason to think that she has ever taken the oxide of silver, or suffered either from cutaneous eruptions, or any form of syphilis. Her mode of living has been regular, and she has generally enjoyed good health.

About six years ago, without any premonitory symptoms, she was suddenly attacked with loss of consciousness, and fell down stairs, striking her back. After remaining insensible for some hours, she entirely recovered, suffering for a short time only from pain where she received the blow. During this fit she neither foamed at the mouth nor bit her tongue.

Five years ago she had scarlatina, but convalesced favourably, and about a year after had ulcerated sore throat. About the same time she was in the habit of lifting heavy weights; and, upon one occasion, was conscious of straining herself; for nearly six weeks afterwards she suffered from pain in the back and loins, and pain during micturition, the urine voided containing at times considerable quantities of blood. After that she was able to follow her ordinary occupation, but was subject, upon any extra exertion, to shortness of breath and palpitation.

Between three and four months ago, being at the time much dejected from the loss of several near relatives, the following symptoms gradually came on:—General languor and weakness, with palpitation of the heart, nausea, and vomiting of bilious matter; fainting fits, recurring three or four times in the course of the day; pain in region of kidneys; the urine passed with pain, having at times the appearance of blood. At this time it was noticed that her complexion, which had previously been fair and clear, with a good colour, was changing. The discoloration gradually affected the whole face and forehead, and her hands, which used to be remarkably white, became of a dusky hue. This change appeared only to take place over those parts of the surface exposed to the sun's action; and, as it commenced in hot weather, she attributed

it to that cause, but a patch of the same character soon after appeared over the sternum.

For the last three months, the above-mentioned symptoms have become gradually more severe. The discoloration has varied much, at times becoming quite light, and at other times getting much darker; her hair has fallen off rapidly, but has not changed colour.

On admission.—She is a woman of moderate stature. Body well formed, but rather emaciated. Hair dark brown. Eyes hazel, conjunctivæ pearly. She complains of general languor and debility, with indisposition for any exertion, either mental or bodily. She "cannot even bear thinking." Palpitation of heart and faintness, especially if she attempts to move. Darting pain across forehead and eyes; globus hystericus; nervousness and low spirits; restlessness. Pain of a dragging character at scrobiculus cordis, and tenderness at same spot; the aortic pulsation is also felt very distinctly there. Anorexia, nausea, and occasional vomiting of green bilious matter.

The whole skin of the face is of a light brown colour, equally distributed over it; but on each side of the forehead is a darker patch, much resembling, at a first glance, pityriasis versicolor; in spots it appears as if this discolouration had been rubbed off, and the skin is very white. Where the skin of the forehead has been covered by hair, it is of a normal colour. Underneath the eyes, and most marked at the inner margin of each orbit, is a dark areola. Over the circle described by the orbicularis oris, and extending beyond its margin downwards, the discoloration is considerably increased; the mucous membrane of the lips is stained as after eating mulberries; the neck down to the clavicles is of a light brown colour; skin of the back is natural, but above the crests of the ilia, most marked on the right side, are patches of a dark colour; about the centre of sternum is another patch, but not very distinct. Hands and arms, as far as the elbows, are of the same light brown colour as the face; but in the flexures of the elbow-joints the skin is much darker, and the folds in the palms of the hands are mapped out; the dorsal aspect of the hand is darker than the palmar. Abdomen and lower extremities are free from patches. The discoloration throughout presents a very symmetrical development. The skin over the whole body is rather dry and rough; at times very hot, but seldom perspiring. The hair very thin, and the top of the head quite bald; but a careful examination of the surface fails to detect any abnormal condition.

The spinal column is well formed. Percussion over the vertebræ gives no pain, but steady pressure over the fifth, sixth, and seventh dorsal vertebræ, and over the heads of the corresponding ribs, produces a sharp, cutting pain, which lasts for several minutes. Tongue of natural colour, rather dry and furred; pulse 86, very small and remarkably compressible; heart and lungs appear quite healthy; no anasarca or ascites; micturition free; urine light coloured; neither heat nor nitric acid produces any deposit; bowels costive. Ordered,

Ol. ricini ʒss. statim; potass. iodidi gr. iij. ex dec. sarzæ; ter die sumend.; meat diet with half a pint of porter.

No alteration took place in her symptoms until October 30, when the daily report states that "her countenance appears certainly darker." On the following day the catamenia appeared, and she was at the same time attacked with pain at scrobiculus cordis, tenderness over abdomen, vomiting and inability to take food, with sudden weakness and prostration of strength. She was then ordered mist. effervescens 4tis horis, port-wine ʒiv.

In two days the catamenial discharge, which had been very scanty, entirely ceased. Sickness followed every attempt to take food, and wine was the only nourishment she could retain. Great pain at scrobiculus cordis, which was somewhat relieved by the application of warm poultices.

On the 3rd of November the report states that she was lying in a state of extreme prostration, both mental and physical. Was extremely nervous and desponding; hardly able to answer questions. The tenderness in the dorsal region was so much increased, that she could not bear the slightest pressure. Extremities cold. Pulse hardly perceptible at the wrist. Everything which was taken was immediately vomited. Heart's action extremely feeble. Great tenderness at scrobiculus cordis. Ordered, soda-water and brandy.

On the following day restlessness had supervened upon the prostration, which had become more intense. She was covered with a clammy perspiration; pulse just perceptible, 120.

On the 7th, a sweet smell was detected in her breath, resembling that noticed in patients suffering from diabetes; the urine was scanty and pale; specific gravity, 1010, free from any trace of sugar or albumen. Her pulse was so small, that it could not be satisfactorily counted, and she was rapidly emaciating. From that time until the 11th, very little alteration took place in her condition. During that period she lived entirely upon wine and brandy, the irritability of the stomach remaining so great as to prevent any food from being retained. The pain at scrobiculus cordis not relieved. Her pulse upon several occasions was imperceptible at the wrist, and her surface generally covered with a clammy perspiration. The bowels were costive. The most careful examinations failed to detect the existence of any organic disease.

On the 11th of November, her friends, in defiance of every argument which could be used, persisted in removing her from the Hospital, although informed that her removal would probably induce a speedily fatal termination. She survived the journey to Deptford by only a few minutes, expiring quietly and having been sensible to the last.

As the friends would not allow a post-mortem examination to be made, a coroner's inquest was held; but such was the determined opposition, that it was not until eight days after death that the examination was accomplished by Mr. Brodribb, House-Surgeon to the Surrey Dispensary, who gave the following account:—The bronzed condition of the skin still very marked; the abdominal cavity only was opened; peritonæum healthy; kidneys and liver of natural size, both considerably decomposed and softened; no apparent disease; pancreas, spleen, uterus, and appendages, apparently healthy; stomach and small intestines empty; no ulceration; in lower part of colon and rectum were solid fæces. The supra-renal capsules were carefully looked for, but in their place were only found small masses of a soft, tenacious matter, of a yellowish colour.

Remarks.—We have given the history, etc. of this case in some detail, on account of the imperfect nature of the post-mortem evidence. Having regard to exact correspondence between the constitutional symptoms during life and the absence of lesion of other viscera after death, there can, we think, be little doubt but that the supra-renal capsules were destroyed by disease.

HOSPITAL NOTES.

SULPHUR EXTERNALLY IN THE CURE OF RHEUMATISM.—Sulphur is an old and favourite remedy in many forms of rheumatism, and in none more so than in sciatica; usually, however, it is administered internally, and we do not remember having seen it made use of in the mode in which it is employed by Dr. Fuller, at St. George's Hospital. If the sciatic nerve is the part implicated, Dr. Fuller orders the whole of the affected limb to be encased in flannel, thickly sprinkled with precipitated sulphur. This flannel is kept in its place by means of a bandage, and the whole limb thus bandaged is "covered with oiled silk or gutta percha, which has the effect, not only of increasing the warmth and confining the vapour of the sulphur, but also of obviating the disagreeable odour consequent on the application of the remedy. This bandage should be kept applied day and night. Contrary to what might be expected, *à priori*, absorption of the sulphur takes place rapidly, and the breath, the urine, the secretions from the bowels, and the cutaneous exhalation, unmistakably attest its presence in the system." (Dr. Fuller "On Rheumatism, Rheumatic Gout, and Sciatica," ed. 2, pp. 456, 7). If the pain is seated in the shoulders, or other parts to which the sulphur cannot be applied in the mode above specified, Dr. Fuller orders the compound sulphur ointment to be rubbed in for twenty minutes, night and morning. In rheumatic affection of the shoulder-joints, and in those instances in which the pain remains fixed about the insertion of the deltoid muscle, Dr. Fuller assures us that no external application proves equally useful; and, as he has two patients at present under his care at St. George's Hospital, for whom he has prescribed this remedy, we hope, ere long, to be able to confirm this statement. The value of sulphur externally in sciatica is dwelt upon at some length in the second edition of Dr. Fuller's work, and a case we have recently observed under his care at the Hospital bears out the statements there

made as to its efficacy. The patient, a man 33 years of age, had been suffering from sciatica on the left side nearly nine months, and had been under treatment during the greater part of that time. The usual remedies had been employed without success, and the man's health was beginning to fail. Dr. Fuller prescribed full doses of the sesquioxide of iron internally, and applied sulphur externally, in the manner already specified. In little more than a week the pain was much relieved, and had ceased altogether in less than a month. The Doctor remarked that this case was one only out of many in which he had observed the greatest benefit from the external use of sulphur, but that the remedy is not equally successful in all instances. When the case is attended with feverishness, and with acute pain, even when the limb is at rest, he has never seen relief result from its employment, nor has he when the skin is dry and inactive. In such cases the sulphur remains unabsorbed for many days, or even weeks, and is, therefore, incapable of exerting its curative action. But when there are no symptoms of active disease, when the pain is of a dull, aching character, and is felt chiefly, if not solely, when the limb is in motion; and when, more especially, the skin acts freely and the sulphur is rapidly absorbed, so as to require renewing every third or fourth day, then, according to Dr. Fuller's observation, nothing proves so serviceable as the sulphur bandage.

THE OPHTHALMOSCOPE.—Probably practical men have not as yet found that assistance in the diagnosis of disease of the posterior part of the eyeball that it was hoped the ophthalmoscope would afford. However, the instrument is of much value, and we could readily point out the probability of its increased usefulness. The following case will exemplify its application:—A young man applied to Mr. Walton, because he could not see with the left eye. When the eye was directed forwards there was a glimmer of light, as he described it, "to the left," but this was lost when the eye was turned outwards. There was not any objective symptom, except inactivity of the pupil. According to the history, a blow was received on the eyeball from a stone many months ago, and in a few minutes sight was lost. So apparently slight was the injury, that the surface of the eye was merely a little blood-shot. There was no after-symptom, not even pain. Mr. Walton determined to use the ophthalmoscope; and having seen some remarkable changes in the eye, brought the man to St. Mary's on Wednesday last, to show him to his colleagues, or any gentleman who had not seen the ophthalmoscope applied. When the reflection of the mirror was thrown directly on the dilated pupil, the eye was not always at once illuminated, as happens when the interior of the organ has not undergone any structural change, the light falling as it were on a semi-opaque substance, but occasionally it enticed and produced illumination. A movement or two of the eyeball was sufficient to overcome this obstacle, which was apparently by the displacement of some substance. When the light was thus admitted, there was visible on the outer side of the eye a membranous-looking body, with red vessels moving in undulations, and which Mr. Walton considered to be detached retina. With a little management of the ophthalmoscope, and altering the position of the eye, the ramification of the artery on the inner portion of the retina was recognisable. This was considered to be a satisfactory demonstration that the eye was destroyed, and that all treatment must necessarily be useless. If the ophthalmoscope only saved patients from useless courses of mercury, blistering, &c., and practitioners from the discredit of exciting false hopes, its utility would be very great. Mr. Holmes Coote has had a room fitted up at St. Bartholomew's, where the eye can be conveniently examined by the ophthalmoscope. He gave a very useful clinical lecture on the 12th instant, explaining the use of the instrument, concluding by narrating the following case:—"A woman is at the present time in the Hospital under my care, in whose right eye I have made an artificial pupil with advantage, and propose repeating the operation on the opposite organ. Two years ago she had an attack of syphilitic iritis, which produced the usual effects of adhesion of the margin of the iris to the crystalline lens, and contraction and nearly complete obliteration of the pupil. By dilating the pupil in one direction, where the adhesion was less firm, by means of atropine and using the ophthalmoscope, I ascertained that the choroid was tolerably healthy, and I therefore recommended the woman confidently to submit to an operation which would allow the free passage of light into the

globe. This has been done, and she can now make out large print with a glass. My friend Mr. Wordsworth, of the Royal Ophthalmic Hospital, mentioned to me a case of blindness, ensuing after a blow, due entirely to an extravasation of a clot of blood in the vitreous humour in the direct axis of vision. It was quite invisible in the unassisted examinations, the eye of the patient looking natural. Now, many of you will enter the public service, where you will have to decide upon cases such as these. A man, blind of one eye, especially the right, is hardly fit to be a soldier; and yet you might be inclined to accuse the man of malingering in such a case as the preceding, without the assistance derived from the ophthalmoscope. A woman was recently dismissed from a large Hospital as incurably amaurotic. It was discovered in another place by means of the ophthalmoscope that a melanotic tumour was growing from the back of the eye, and the organ was extirpated accordingly." Mr. Coote uses the instrument of Coccia. A paper on this instrument by Mr. Spencer Wells, with full directions for its use, and a woodcut, may be found in the number of this Journal for September 10, 1853. Papers by Mr. Dixon and Dr. Williams will be found in our second volume for 1854. The instrument of Anagnostakis is described in the number for February 10, 1855; and the very valuable Ophthalmoscopic Sketches of Dr. Frank will be found in our last volume.

THE ABUSE OF IRRITATING APPLICATIONS IN CERTAIN FORMS OF OPHTHALMIA.—There is an instructive case now under Mr. Critchett's care in the Royal Ophthalmic Hospital, in which the greatest benefit has been derived from desisting from the measures which had previously been employed. The patient is a lad of 18, to whose eyes, for four years past, stimulating drops had been daily applied on account of chronic inflammation and thickening of the conjunctiva. His eyes had been kept in a state of constant irritation, and when admitted his vision was very imperfect on account of superficial vascularity of the cornea. He had been sent up from a considerable distance in the country. Mr. Critchett directed the eyes to be left quite alone, a single seton thread being introduced in each temple. The improvement was extremely rapid, and within a week the greater part of the vascularity had cleared away. No doubt the seton has had some good influence; but looking at the rapidity of the cure, it seems certain that the chief agent has been the rest from injurious applications. Cases more or less similar are constantly presenting themselves, in which with a perseverance worthy of a better cause, irritating collyria have been employed for periods far too long.

CANCER OF THE BLADDER—ULCERATION THROUGH ITS FUNDUS INTO THE ABDOMEN—ABSCESS PRESENTING THROUGH THE ABDOMINAL WALLS.—An old man died a week ago in St. George's Hospital, under the care of Mr. Hawkins, who afforded an example of the very unusual state of things designated in this heading. For some weeks before death there had been a swelling presenting in the left hypogastric region, the real nature of which had been doubtful. It fluctuated, and the propriety of opening it had several times been discussed. At the autopsy this proved to be a collection of thin grumous matter, which had all but made its way through the abdominal muscles, and which was connected with a large ulcerated opening into the fundus of the bladder. The wall of lymph circumscribing the fluid was extremely thin, and broke down readily. Had an opening been made, there would have been great risk of injuring the intestine. There was general recent peritonitis. The disease of the bladder which had induced the ulceration was infiltrated cancer of its coats; the latter were much thickened, and showed on section soft cancerous material disorganizing the tissues. The edges of the ulcer were ragged and sloughy. It is not improbable that there had been some old-standing disease of the bladder prior to its affection by cancer, as the man had been cut for stone by Sir B. Brodie many years ago. He had been repeatedly the subject of Surgical treatment, and had also had his right leg amputated by the same Surgeon.

FIVE CASES OF LIGATURE OF THE EXTERNAL ILIAC ARTERY FOR ANEURISM—SMALL AMOUNT OF DANGER ATTACHING TO THE OPERATION.—Mr. Hilton has recently dismissed from Guy's Hospital a man for whom some four months ago he performed ligature of the external iliac, on account of aneurism of the femoral extending nearly up to Poupart's ligament. The recovery was complete, the wound being soundly healed, and the tumour solid. It had, indeed, been throughout quite

satisfactory excepting some slowness in healing, and at one period a tendency to sloughing on the part of the wound. There had never been any inconvenience as regards the circulation in the limb. This case makes the fifth ligature of the external iliac which has been performed in the London Hospitals during the last three years, and of these four have been successful. The operators have been:—Mr. Skey, once; Mr. Solly, once; Mr. Hilton, once; and Mr. Fergusson, twice. The fatal case was one of those under the care of Mr. Fergusson, and in which unusual difficulties attended the operation on account of the inflammation of glands, cellular tissue, &c., surrounding the vessel. The patient died of pleurisy. In all the cases the patients were men, and in fair health, the disease being aneurism of the femoral. The proportion of deaths is exactly that shown in the collection of cases made by Dr. Crisp in his Jacksonian Prize Essay on Diseases of Arteries, who gives 45 cases, and 9 deaths, or exactly 1 in 5. It must be remembered, however, that Dr. Crisp's statement has no claim to be trusted as statistical, since it is made from published cases, whilst it is well known that successful ones find their way into print much more readily than those ending fatally. Still there can, we think, be little doubt but that ligature of the external iliac is a much less dangerous operation than is generally supposed. Whilst on this subject we must advert to a very interesting case of wounded artery now under Mr. Cock's care in Guy's.

PUNCTURED WOUND OF THE SUPERFICIAL FEMORAL ARTERY.—LARGE FALSE ANEURISM WITHOUT PULSATION.—ULCERATION AND PROFUSE HÆMORRHAGE—LIGATURE OF THE VESSEL ABOVE AND BELOW THE WOUND, TEN DAYS AFTER THE ACCIDENT—RECOVERY.—A cachectic, emaciated man, aged 22, was admitted, with what, at first sight, appeared to be a large abscess in the cellular tissue of the front aspect of his right thigh. The swelling fluctuated, and evidently contained fluid, while it had no perceptible pulsation. He stated, however, that it had followed an accidental wound with a pen-knife, and on examination a small scar was discovered in the skin over it. The wound had been inflicted four days previously, and had been attended at the time by profuse bleeding. This history made the diagnosis tolerably clear; but as there was nothing urgent in the state of things, it was determined to wait. On the sixth day a scar reopened, and a considerable quantity of thin, reddish, serous fluid escaped. On the second day following, a very profuse arterial hæmorrhage occurred, and it was now evident that there was no time to be lost. Mr. Cock decided to lay bare the artery at the supposed place of wound, and pass a ligature around it above and below the puncture. In the operation there was first opened a large cavity immediately beneath the skin, which contained serous blood-stained fluid, but no coagulum; and then, on cutting through the fascia, a second sac, filled with blood-clot, was discovered. On floor of the latter the vessels ran. After the coagula had been removed there was, at first, no bleeding, even when all pressure above had been removed. Mr. Cock now examined the parts about the vessels, and perceiving at one spot a little conical mass of fine fibrin, detached it, when immediately a profuse gush of blood took place. The armed needle was now passed under the vessel, and the upper ligature tied. The distal extremity of the artery still bled profusely, the blood flowing in a continuous stream, and being of a dark colour. After the tightening of the lower ligature there was still some bleeding, which proved to be (regurgitant of course) from a branch given off from the included portion of the vessel. A third ligature was passed, and all hæmorrhage ceased. After the operation, the case did uninteruptedly well, and the wound is at present all but healed. In his remarks upon the case to his class Mr. Cock adverted to the strong confirmation which it gave to the modern practice of tying wounded arteries at the injured spot, instead of doing the Hunterian operation. He could quite conceive, however, that there might be exceptional cases in which the latter would be preferable, and every case ought to be judged on its own merits. He also directed attention to the useful guide to the wounded spot, which the little plug of lymph had afforded in the operation, and stated that he had several times before found the same condition of things.

ETHEREAL SOLUTION OF IODINE AS AN APPLICATION TO BRONCHOCELE.—Mr. Curling has under care in the London Hospital an instructive case, in which great benefit has been derived from painting a bronchocele with the ethereal solution of iodine. The tumour was of unusual size, and had offered a

serious impediment to respiration. The solution quite blisters the skin, and causes severe burning pain, but it is undoubtedly much more effectual than those of which spirit is the menstruum.

EXPECTED OPERATIONS.—At St. Thomas's on Saturday, this day, Mr. Solly has a case in which a large tumour is to be removed from the neck; and Mr. Simon has a case of cleft palate, which may be submitted to operation (uncertain).—At King's College, on the same day, Mr. Fergusson has an excision of an ankylosed elbow-joint; the removal of a scirrhus breast, and a plastic operation on the face.—There are four or five cases of stone in the bladder under care in Guy's Hospital, and some of them will probably be operated on on Tuesday next.

NOTES AND QUERIES.

He that questioneth much shall learn much.—*Bacon.*

No. 182.—KAHUKAHU.

The following passage from the second edition of a work just published by Messrs. Longman, entitled "Traditions and Superstitions of the New Zealanders," by Dr. Shortland, is interesting. The origin of the curious notions entertained by the New Zealanders, of the spirits of the germs of human beings being the causes of deadly diseases is worth investigation:—

"Verbi Kahukahu significatio simplex est *panniculus* aut *vestis*. *Kahu* et *kakahu* formæ usitatiores verbi sunt: et *panniculus* quo utitur femina menstrualis nomine *kahukahu* dicitur κατ' ἐξοχήν. Apud populum Novæ Zelandæ creditur sanguinem utero sub tempus menstruale effusum continere germina hominis; et secundum præcepta veteris superstitionis *panniculus* sanguine menstruali imbutus habebatur sacer (*tapu*), haud aliter quam si formam humanam accepisset. Mulierum autem mos est hos *panniculos* intra juncos parietum abdere: et hæc de causâ paries est domûs pars adeo sacra ut nemo illi innixus sedere audeat."

No. 183.—A BATCH OF QUERIES.

I shall esteem your insertion of the following queries a great favour, as I have no doubt that some of your correspondents will be able to answer them:—

1. In what number of the *British and Foreign Medico-Chirurgical Review* can I find notice of a case of arsenical poisoning, consequent on the decoration of a room with paper stained with an arsenical pigment?

2. What is "methylated spirit?"

3. Who attributed the effects of lead poisoning, or some of them, to the fumes of turpentine? Where can I find an account of these views?

4. Where can I find any notice of the differences, if any, between the first and second impulses, in cases of aneurism; as to duration, intensity, etc. In the absence of published information, can any one favour me with cases or remarks bearing on this point? I am, &c. W. F. W.

No. 184.—CHEAP OXYGEN AND HYDROGEN.

Persons living in large towns, well lighted with gas, can have no conception of the inconvenience that we, who are residing in country villages, suffer from the want of it these dark nights. It has occurred to me, therefore, that I shall be conferring no small boon on my fellow-townspople could I be instrumental in lighting the town with the oxy-hydrogen gas,—our inland position rendering coal gas out of the question, owing to the carriage of the materials being so expensive. Would some reader, therefore, kindly give me their opinion as to the cheapest way of generating oxygen and hydrogen for my purpose, economy being essentially necessary?

January 20, 1857.

I am, &c.

J. G.

ANSWERS.

No. 166.—DR. JAMES SIMS.

When I asked, in your number for December 27, information respecting Dr. James Sims, I stated that he was mentioned in Wadd's "Nugæ Chirurgicæ," and also in the "Nugæ Canoræ," both of which works I happen to possess. The copy of the "Nugæ Chirurgicæ; or, a Biographical

Miscellany illustrative of a Collection of Professional Portraits," by William Wadd, Esq., F.L.S., was published in London in 1824, and the notice of Sims at page 144 is as follows:—"Sims, James, M.D., LL.D., born 1741, died 1820, Physician to the General Dispensary, and many years President of the Medical Society." Now, the "Nugæ Canoræ," which is generally attributed to Wadd, was printed in 1827, but without the author's name. Can any of my readers tell me what authority there is for believing that the "Nugæ Canoræ" was written by Mr. Wadd, and what edition of the "Nugæ Chirurgicæ" it is which is referred to in that work? Finally, I should like to know where Mr. Wadd's collection of portraits is at present. I am, &c. CURIOSITY.

No. 176.—AN IRISH GIANT.

Allow me to correct some erroneous statements respecting my late friend, Jack Joyce, which have been copied from the *Gentleman's Magazine* into the last list of Notes and Queries. The Joyces are supposed to have come to Ireland from Wales with Strongbow. They obtained grants of land in the West in process of time, and an extensive and very beautiful district between Lough Corrib and the Killeries is still called Joyce Country. Although the clan has lessened considerably, there are even now a great number of the family in that district; and in the different burial-places around the stranger is pointed out the long graves of the Joyces, who are always remarkable for their great stature. John Joyce did not reside in Connemara, but on his own territory of Joyce Country. He was about six feet two inches high, but did not appear so much, owing to his great breadth and the roundness of his shoulders. He was remarkable for a very ugly squint. To distinguish him from some of the dark-haired Joyces, and from another big Joyce called *Shawn Justice*, he was called on account of his fairness, *Shane*, or *Shawn na Boiné*, White John, and not Mr. Nabontree, as stated by the writer in the *Gentleman's Magazine*. I am, &c. CURIOSITY.

No. 179.—A PRIVATE HEALING.

It may interest Dr. Druitt (see Notes and Queries, No. 179), and perhaps others of your readers, to know that the principal parts of the Office for Healing by the Royal Touch, copied from the Book of Common Prayer, were published in your journal for Oct. 20, 1855. I am, &c. M.D.

No. 181.—VACCINATING DOGS TO PREVENT DISTEMPER.

Your correspondent, "A Country Practitioner," will find no difficulty with his vaccinations, provided he select the axilla as the place for the insertion of the lymph. Owing to the absence of hair from this part, it is peculiarly suitable for the operation. I am, &c.

SAMUEL ADOLPHUS PHILBRICK.

Colchester, Jan. 17, 1857.

No. 181.

Your Correspondent, "A Country Practitioner," failed in producing the proper vaccine vesicle in the dogs, no doubt, from his mode of applying the virus. The successful plan is to arm a needle with floss silk, and saturate a small portion of it in the vaccine matter, and then to pass it through any of the little projections on the under surface of the dog's ear, and tie it, to prevent its being scratched away. This method I have repeatedly tried, and never found it fail. See, also, Colonel Hutchinson on Dog-breaking. I am, etc.

JOHN MILL FRODSHAM, M.R.C.S. Eng.

University, Edinburgh.

No. 181.

I believe that more than twenty-five years ago the huntsmen of Lord Southampton and Mr. Osbaldeston vaccinated their hounds in the ear from the arm of a child successfully, to prevent them having the distemper. The distemper is considered to resemble measles in the human subject, and runs into pneumonia in a similar way. I have repeatedly relieved it by opening the jugular vein with a lancet, and taking from x to ʒxij. of blood. R. C. B.

THE POPULATION OF FRANCE.—The returns show that France possessed in 1856, 36,039,364 inhabitants, while in 1852 the number was 35,781,628. They consequently represent an increase of 257,736 inhabitants during the last five years. The mortality, which was one in every 25 inhabitants in 1772, was only one in every 44 in the year 1844. It therefore ensues that mortality has diminished to the extent of three-quarters in the space of 72 years.

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Medical Times & Gazette.

SATURDAY, JANUARY 24.

CLERICAL PATRONAGE OF QUACKERY.

WE are by no means disposed to join in the cry raised by some of our daily and weekly contemporaries of the press against the Clergy of the Church of England. On the contrary, we regard the Clergy as a body as among the best friends of our Profession, and as our most useful assistants in works of charity and mercy. They take an active interest in the welfare of our Hospitals. They preach sermons in the support of these and all charitable institutions. They take a large share in the duty of management; and every one must acknowledge that in many cases where the power of medicine fails to cure bodily disease, the kind ministrations of the Clergy succeed in relieving mental suffering. Would that Divinity and Physic could always walk hand in hand doing good! Would that all members of the clerical body deserved the praise the order has earned by good works! But this is too much to expect in this world of imperfections; and we must not be surprised to find among a large body of men, some feeble-minded, superstitious, well-meaning, but mischievous simpletons, whose patronage of mesmerism, homœopathy, and every new form of quackery is a disgrace to the educated classes of the age.

We have been led to these remarks by a correspondence which has appeared recently in a Hampshire newspaper. The Rev. Philip Jacob, Canon of Winchester Cathedral, and Rector of the adjoining parish of Crawley, has published a letter to Dr. Crawford, the well-known Physician of Winchester, on the virtues of a patent medicine called Warburg's Fever Tincture. The Reverend gentleman, with amiable simplicity and professional circumlocution, says, that he wishes "to call attention to the use of a *new remedial agent or rather instrument* in the treatment of fever." He says that he first heard of it from a respected Rector, who told the Archbishop of Canterbury that it had saved two of his children in malignant scarlet fever. So he provided himself with this medicine, "albeit, the price of a small bottle—now reduced to 3s. 6d., a Company having undertaken the sale of it—was 8s. 6d." After some time he administered it in "a case of remittent fever of about four days' continuance;" and a Medical man, called in to complete the cure some days afterwards, said there was nothing left for him to do. In another case, of typhus, he gave a bottle of the tincture to the Medical attendant, who administered it with the best effect, and "had not found it necessary to prescribe *any remedy but wine* since that day." The patient recovered. But Mr. Jacob goes further than this. Under the guise of great personal respect for Dr. Crawford, whom he compliments on "his character for superiority to mere Professional routine," he insinuates against the whole Profession a charge of "prejudice against everything new in Medical

science." In fact the letter is a direct public challenge to Dr. Crawford. "*Oyez! Oyez! Oyez!* I, Philip Jacob, Canon of Winchester, assert, that Warburg's Tincture is a successful 'remedial agent, or rather instrument,' in the treatment of fever; if Dr. Crawford denies it, he shall be branded as an 'adherent to mere Professional routine,' and be convicted of prejudice against anything new in medicine."

As for the facts about Warburg's Tincture, they lie in very small compass. It was introduced into England about twenty years since, and was puffed as a remedy for fever. It has been tried in our Hospitals, and in naval and military practice; and we can state, after personal observation under official direction in the public service, that the effects are such as might be expected from a medicine containing a large dose of quinine or beeberine, combined with an aromatic stimulant and some spirit. There was no reason whatever to prefer it to a dose of quinine and beeberine, *plus* a glass of hot brandy-and-water. It is well known that Dr. Babington made trial of it some years since at Guy's Hospital, under a promise from Dr. Warburg that he would make known the composition of the remedy. This promise was evaded. The remedy has been analyzed by Dr. Odling, as well as by various continental Chemists, and found to contain about eight grains of sulphate of quinine in each bottle, with some beeberine. We may add that the price is, as the Canon quotes it, most exorbitant.

But let us suppose that Dr. Warburg's Tincture is not an old remedy in disguise—not a mere concoction of quinine, sold at an exorbitant price, just to make the public believe it is something extraordinary; let it be granted that it contains the essence of some vegetable which Providence has endued with the power of mitigating pestilence; why does not this benevolent Canon turn on Dr. Warburg, and denounce the man who, from motives of cupidity and selfishness, dares to conceal so great a boon? Selfishness, too, of the most shortsighted kind! For, if Dr. Warburg had come forward with a new remedy openly, had challenged the Medical world to try it, and had established its claims as a febrifuge, he would have received an abundant return in legitimate emolument and Professional distinction. Instead of this, Dr. Warburg prefers to ally himself with the obscene and reckless herd whose advertisements in every country newspaper are an outrage on decency, and a standing witness to the credulity of the public. In such company his assertions must be taken with distrust.

Dr. Crawford, in a reply which he had the courtesy to publish, fully shows the unreasonableness of his clerical appellant. He points out the inconclusiveness of attributing the cure of a fever to Warburg's medicine, and then saying that it required no other remedy except wine, just as if wine was not the remedy, *par excellence*, for fever. He shows further that the Medical profession, in their dislike of patent medicines, are not actuated by any paltry bigotry, such as the Canon charges them with, but by a rational hatred of extravagant pretension and charlatanry in some cases, and of monopoly and extortion in others.

We know, unhappily too well, how readily the public in general are to receive the statements of any wonder-worker so that the wonder be gross enough. No matter what it be,—table-turning, spirit-rapping, fever tinctures, Morrison's pills, mesmerism, homœopathy,—they are always willing to lend it a helping hand, especially if it be something tending to disparage the Medical profession. We will not, however, condescend to enter into any vindication of our Profession from the charges of ignorance and blindness so constantly brought against it. We may leave the homœopath to argue with the disciple of Morrison, and the mesmerizer with the water doctor; and they may take the Speaker of the House of

Commons, if they please, as their umpire; although we believe it is no secret that this exalted functionary formerly publicly avowed his faith in the Medical pretensions of an illiterate vapour-bath man, who affirmed that all diseases might be prevented if buttercups were rooted out of our pastures. When the quackites are agreed as to which is the infallible system of healing we will listen to their attacks on us.

Speaking seriously, a clergyman like Mr. Jacob, who, besides having the care of a large parish, is also encumbered with cathedral duties, must be sadly at a loss for work when he dabbles in physic. Let him attend to his proper duty of combating moral evil. Let him join the working men of his order, and attack the drunkenness and fornication which infest our population and fill our hospitals. Let him try to diminish the number of illegitimate births, which in the rural districts of Hampshire, in the Canon's own district, amount to at least one in fourteen of the whole, being the full average of all England. Let him claim at the hands of the lords of the soil, fair wages and decent lodgings for the poor. Let him discountenance that unchristian vanity of class which banishes our poor from places of worship, and he may leave the investigation of fever medicines to those whose education and occupations qualify them for such a task.

THE WEEK.

Two most deserving Medical Officers of the Army have been lately nominated Companions of the Bath; but we feel bound to demand why no Medical officer who served at Scutari, or in any of the Hospitals of the Bosphorus, has been either rewarded or promoted, although their commandant, General Storks, has deservedly been made a K.C.B. This withholding of honours from the Medical officers who bore all the brunt of these Hospitals is the more unjust, because statistics prove that the risk to life was greater, in the case of Medical officers in the hospital, than in the field. The total number of deaths among the Medical officers was about 50. Of these, 24 died at Scutari and Kululu, 22 in the Crimea, 3 or 4 in Bulgaria, and one—Dr. Spence—was drowned. Now allowing that of the 24 deaths at Scutari, 4 died of disease contracted in the Crimea, yet as the numbers serving at Scutari were never more than half the numbers in the Crimea, the risk to life, as proved by the ratio of mortality, was double at Scutari. Is the above exclusion, therefore, not unjust? and is it not impolitic thus to taboo the general Hospitals of our army, considering the immense importance of these establishments to the well-being of the sick, and to the efficiency of an army in the field? What Medical officer in future will serve contentedly in the Hospitals, when he feels that he is, by so doing, shutting himself out from reward? As to the argument that the Military Order of the Bath can only be given for service in the field, it may be asked, Where was Commissary-General Smith during the whole period of the war? Was he not in Constantinople? Was he ever in action in his life, or under fire? Why, then, was he made a C.B., and a Knight of the Legion of Honour? Because the Commissary-General knew that no officer of his department deserved so well as Mr. Smith, whose duty was to provide the fighting men with food, and thus keep them in fighting condition, but not to fight himself; and it would have been not only unjust, but preposterous, if Mr. Smith had been left unrewarded, while others, who were as free from risk of shot and shell in Balaklava, were decorated. The same may very well apply to the Medical officer, whose risk from shot and shell is small, while his risk from the performance of his own duties are so great, that their aggregate loss is proportionally very high. Again, in reply to a question from Mr. Watson, Mr. Peel stated in the House of Commons that no

difference would be made between officers serving at Scutari and those serving in the Crimea. We have a right to demand that this promise should be fulfilled.

The subscription for a testimonial to Dr. Livingston goes on increasing, but we should be glad to see this persevering Fellow of the Glasgow Faculty receive more encouragement from the Profession. His "disinterested and self-denying labours in the cause of science and philanthropy" deserve some mark of general approbation, especially as we are informed that these labours, while opening out new fields for our commercial enterprise, and discovering new stores of national wealth, have by no means enriched him. We have been informed, also, that the Missionary Society which sent out the man who has done them so much honour has taken umbrage at the honours bestowed on him by the Geographical Society and other learned bodies, so that there is greater need for liberal exertion in his behalf, and we cordially recommend the testimonial to the attention of our readers.

The Medical Officers of the Wandsworth District Board of Works have recently drawn up a conjoint report on the Main Drainage question. The report suggests that, for the purpose of securing a complete drainage scheme, there must be a continuous flow of water throughout the whole system of sewers, alike independent of rain and other accidental supplies, of the liberality of Water Companies, or of the carefulness of each member of the community. But where is the flushing water to come from, which, entering this Babylon by immense arterial rivers, is to make capillary networks about the bricks and mortar, and then return by immense vein rivers to the main channel of sewer escapement? That question our Wandsworth friends feel a difficulty in answering; for they admit that the Thames would possibly not be sufficient. They, therefore, go to the Atlantic, and suggest that an aqueduct be brought from the sea, for this sewer flushing business, by which means an unlimited supply of water would at once be obtained, to serve for the purpose of drainage, street washings, public baths and fountains, and to answer for many other purposes for which filtered river water is now employed, thus leading to a great saving in the expense of water drinking. We doubt not the entire practicability of this plan, as far as the engineering part of it is concerned. But the objection that will follow, all matter of engineering skill and cost aside, is, that the manure is lost, and we cannot afford to lose it.

Among the events of the week, we must not pass over the commencement of a Course of Lectures on Military Surgery at the Grosvenor-place School. Mr. Blenkins, Surgeon of the Grenadier Guards, gave his introductory lecture on Tuesday last. Mr. Blenkins's services for nineteen years in the Army, his experience of the active duties of a Military Surgeon in the Crimea, and as a teacher of Anatomy in London, eminently qualify him for the task he has undertaken. His first lecture contained a sketch of the important duties and responsible position of Military Surgeons, with notices of the most eminent men in their departments in the French and English Services in ancient and modern times. He showed how much the efficiency of a regiment and an army depended upon the ability of the Medical Staff, and the manner in which their advice was received, proving that the blame which had been cast upon the members of our Army Medical Department for the disasters in the Crimea was undeserved, and that parliamentary inquiry had led to their triumphant acquittal, but scanty reward. The course will be continued on Tuesdays and Thursdays throughout the remainder of the Session, and

we can cordially recommend it to those gentlemen who are preparing to enter the Army, Navy, or East India Company's Service.

In the case of poisoning by arsenic at Chesham, to which we alluded last week, Sir George Grey authorized the Coroner to pay the necessary fees to Professor Taylor, and a verdict of Wilful Murder has been returned against the husband of the deceased woman. It appears that the woman had purchased half an ounce of arsenic at a druggist's shop in Chesham, alleging that it was to poison mice. She signed the entry required by the Act, and the arsenic was given to her coloured with soot. Professor Taylor found the poison in the contents and coats of the stomach, but not in the tissues to so great an extent as he had observed in other cases. This might be explained on the supposition, either that it had been taken so short a time before death that there was not time for diffusion, or some days before death, and had been removed by elimination; so that the appearances were consistent either with recent administration in a large dose, or old administration in several small doses. The defence set up was that the deceased had taken the arsenic voluntarily to procure abortion; and one of the witnesses deposed that the prisoner had given to her two doses of the aloetic powder sold by druggists as "hiera picra," with the same intent.

Another instance has just occurred, in which a member of our Profession has been ill-treated by a Board of Poor-law Guardians. Mr. Bolton, the Surgeon of the Leicester Workhouse, has been compelled to resign his situation "in consequence," to use his own words in a printed letter which has been forwarded to us, "of injustice, insult, abuse, and almost every other violation of gentlemanly bearing, which I have received at the hands of several members of the Board. Self-respect," continues Mr. Bolton, "independent of the pecuniary sacrifices which I have made to the duties of office, compels me to sever the connexion between us. In doing this, I will refer you to the Medical book, where you will find that one year's aggregate of weekly returns is 9,314; which, made to divide a salary of £65 (minus £2 2s. paid to the book-keeper) gives a rate of remuneration less than three-halfpence for each. For this remuneration I have had to find time, labour, professional knowledge, and diplomas, medicines, instruments, and dressings," &c. Comment upon this statement is needless, except to express a hope that the facts will come before the notice of the Houses of Parliament, and that, in the meantime, no member of our Profession will degrade himself so far as to accept the situation vacated by Mr. Bolton under such circumstances.

BOOK NEWS.

THE October number of the *Australian Medical Journal* has just arrived. It contains many interesting papers, and the draft of a Medical Reform Bill, recommended by the Medical Society of Victoria, to provide for the registration of duly qualified Medical Practitioners. There is a simplicity in the following clauses worthy of attention at home:—

"XVI. After the expiration of three months after the election of the members of the said Medical Board, no person shall be entitled to recover in law or equity any fee or charge for any medical or surgical advice or attendance; or for the performance of any operation, unless such person shall have obtained a certificate, or letters testimonial, and be registered as a legally qualified Medical Practitioner under the provisions of this Act.

"XVII. Any person who shall, after the expiration of three months after the first election of the members of the Medical Board as aforesaid, for fee or reward, practise as physician, surgeon or apothecary, not having obtained a certificate or letters testimonial from the Medical Board as a legally qualified Medical Practitioner as hereinbefore provided,

or use any medical or surgical title, which by registration he has not given proof of possessing, shall forfeit and pay on conviction, for the first offence, any sum not exceeding thirty pounds, and for any second or subsequent offence, any sum not less than thirty or more than fifty pounds.

"XVIII. If any person shall fraudulently or by false representations obtain any certificate as a duly qualified Medical Practitioner under the provisions of this Act, or any certificate to be registered as such practitioner, or shall forge, alter or counterfeit the said seal, or any such certificate or register, or shall utter any certificate, register or writing, to which the forged impression of the said seal shall be affixed or attached, or any such forged certificate or register, knowing the same respectively to have been forged, or shall falsely advertise himself as having obtained such certificate, or as being so registered. Every person found guilty of any or either of the said offences, and being thereof duly convicted, shall be liable to fine or imprisonment.

"XIX. All offences under this Act shall be heard and determined in a summary way before two or more Justices, and no proceeding under this Act shall be removed by *certiorari* into the Supreme Court."

The *Journal of Public Health* for January contains a number of articles interesting to all engaged in the study of preserving health and preventing disease. The January number of the *Asylum Journal* has some noteworthy papers by Drs. Bucknill, Kirkman, Monro, and Tuke. A strange book, entitled *The Great Law of the Human Mind, and the Heavens and the Earth*, follows, not inappropriately, a notice of the literature of insanity. The following notice sent with it is sufficiently characteristic:—"This work begins the Millennium. The great law of the Creator, that binds mankind together as members of one body, and the sciences, are made plain, and the metals transmuted, artificial riches destroyed. Labour, the only standard of value."—Dr. Jeanneret, in a pamphlet on *Epidemic Cholera, Diarrhoea and Dysentery*, recommends a camphorated aromatic, composed of three grains of camphor and fifteen grains of the powder prepared for aromatic confection. He looks upon this as an "effectual and expeditious method of cure." Those who have treated cholera will not place much faith in any such combination.—Mr. Field's Essay on the therapeutical effect of *Purgatives on the Horse* will probably interest those of our readers who prescribe for their own horses.—Dr. Aldis's Report on the *Sanitary Condition of the Belgrave Sub-district* will be found very useful by Practitioners in that locality. It contains a great deal of information on the geological features, elevation, sewerage, and water supply of the district, with observations on the sources of disease and their removal. Belgravia, notwithstanding its fashionable repute, does not appear to be so healthy as the higher parts of St. George's parish, and this is attributable partly to the low level, and much more to the vicious construction of the poorer class of houses, the overcrowding, and want of sewage. This latter class of evils, we have no doubt, will be soon abated under the supervision of so experienced a sanitary officer as Dr. Aldis. He has appended to his report an account of the analysis of the waters used in his district, the results of which closely correspond with those obtained by Dr. Druitt, and noticed in a former number of this Journal. The Thames water is of fair quality, yet apt to be discoloured by floods; the common well-water full of nitrates, insomuch that the residue explodes during incineration; and the Artesian well water, soft and alkaline. It appears that Buckingham Palace is supplied partly from springs in Hyde Park, and partly from the Artesian well in Orange-street.—Dr. Lionel Beale has just brought out a series of *Tables for the Chemical and Microscopical Examination of the Urine* in health and disease. They are used in his Course of Practical Demonstrations on the Urine; and, with his work on the Application of the Microscope to Medical Chemistry, and Bowman's Medical Chemistry, are all that is necessary to guide the Student or Practitioner who wishes to learn for himself how to examine the urine and urinary deposits.—Two new works, not Medical, have been sent to us for notice. The first, *Traditions and Superstitions of the New Zealanders*, is by Mr. Shortland, an Extra Licentiate of the College of Physicians. It contains a great deal of information likely to interest our readers on diseases and modes of treatment, charms and spells, ceremonies, etc., among these people.—The second, *Bermuda; a Colony, a Fortress, and a Prison*, by a Field Officer, is a very readable account of the island, and of the life of the

British there. The author speaks of a Dr. Smith, who has acquired great celebrity by his treatment of yellow fever, his principal remedy being the mandrake, *Podophyllum peltatum*. Charcoal also is looked upon as both a preventive and antidote.

MEDICAL LICENCES.

CONTINUING the abstract we commenced last week of the Parliamentary paper on Medical Licences, we present the following table of the twenty "qualifying" institutions of Great Britain and Ireland, in the order of the greatest number of qualifications granted by each during the last ten years:—

College of Surgeons of London	4915
Apothecaries' Society, London	2823
College of Surgeons, Edinburgh	1066
Royal College of Surgeons, Ireland	582
University of Edinburgh	524
University of St. Andrew's	497
Faculty of Physicians and Surgeons, Glasgow	367
University of Glasgow	359
University and King's College, Aberdeen	263
College of Physicians, London	242

University of London	241
Apothecaries' Hall, Ireland	214
Marischal College, Aberdeen	161
University of Dublin	143
King and Queen's College of Physicians	97
College of Physicians of Edinburgh	68
University of Cambridge	61
*Queen's University, Ireland	34
University of Oxford	17
†University of Durham	5

Total for the last ten years . . 12,679

- The education required to "qualify" at these different institutions is sketched in the following table, which shows
1. The number of subjects for professional examination.
 2. The number of subjects of preliminary examination.
 3. The number of examinations.
 4. The time taken up by examination.
 5. How they are conducted.
 6. Age of candidates.
 7. Proportion of rejected to successful candidates.

* In operation only since 1852.
† No examinations have as yet taken place. Its degrees are at pre-honorary, and were conferred in 1852, 1853, 1855, and 1856.

INSTITUTIONS.	1. Number of sub- jects of Profes- sional examin- ation.	2. Number of sub- jects of preli- minary exam- ination.	3. Number of Examinations.	4. Time taken by the Examinations.	5. How conducted.	6. Age.	7. Proportion of rejected to successful.
University of London	13	8	3 and 4 for M.D.	20 to 30 hours	Viva voce, written, practical, by dissec- tion, demonstration, and clinical in Hospital.	21 and 25	B.A. 1 to 3. M.D. 1 to 19
" " Edinburgh	11	Latin	3	20 to 30 hours	Viva voce, written, and by demonstration.	21	— 1 to 5.
" " Durham	9	7	2	..	Viva voce and practical operation.	23 and 26	..
London College of Surgeons	4 or 5	..	1	1 hour	Viva voce.	21 and 23	{ Mem. 1 to 7. Fel. 1 to 14. Lic. 1 to 16.
Edinburgh College of Surgeons	10 or 11	3	2	2 to 4 hours	Viva voce, written, and demonstration.	21	— 1 to 6.
Faculty of Physicians and Surgeons	8	Latin	1	1 to 1½ hour	Viva voce, written, and demonstration.	21	— 1 to 3.
Queen's University, Ireland	12	2	2	30 hrs in 5 days	Viva voce and written.	21	— 1 to 4.
King's College and Univ., Aberdeen	8	Latin	1	..	Viva voce and demonstration.	21	— 1 to 4.
Apothecary's Society	8	Latin	1	2 hours.	Viva voce and written.	21	..
London College of Physicians	3	..	6	..	Written and viva voce.	26	— 1 to 6.
University of Glasgow	9	Latin	3	3 hours	Viva voce and demonstration.	21	— 1 to 9.
" " St. Andrew's	6	Latin	1	..	Viva voce, written, and demonstration.	21	* — 1 to 7.
" " Dublin	10	..	1	..	Viva voce and demonstration.	..	{ M.B. 1 to 14. Surg. 1 to 5½
" " Cambridge	4 or 6	..	1	..	Written and viva voce.	..	— 1 to 8 or 11
Marischal College, Aberdeen	9	M.A. or exam.	1 or 3	..	Viva voce, written, and demonstration.	21	— 1 to 7
University of Oxford	7	B.A.	1	..	Viva voce and written.	21	..
King and Queen's Col. Phy., Ireland	9	Latin	2	3 hours	Written and viva voce.	..	— 1 to 14.
College of Surgeons, Ireland	6	Latin	2	2 hours	Viva voce, written, practical, and demons.	..	— 1 to 13.
Apothecaries' Hall, Ireland	10	..	1	1 hour	Viva voce, written, and demonstration.	..	..
Royal Col. of Physicians, Edinburgh	5	Latin	1 or more	..	....	..	1 to 5.

* On one occasion, 1 to 3.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON THE SUCKLING AND FEEDING OF INFANTS.

By Dr. KUTTNER.

Dr. Küttner, of Dresden, presents the following aphorisms as the fruits of his practical observation:—

1. A knowledge of and attention to their proper nourishment is a fundamental necessity for the successful treatment of sick children. He who will cure them must before all things know how to feed them. 2. Articles of diet must often serve as medicine, and medicine be used in place of food. 3. The mother's breast is the best food for the infant; and only when an absence of milk, or the condition of the mother's health renders suckling impossible, should the substitution of a nurse receive Medical sanction. 4. In the choice of a nurse we cannot be too careful and suspicious; but the most careful examination may prove defective unless we can ascertain the condition of her own child. 5. Nurses sometimes conceal their deficiency of milk with much cunning. The continuous,

spontaneous issue of milk is by no means a sign of actual abundance, but far oftener of an atonic state of the milk ducts and nipples. 6. When an infant does not thrive upon a breast, but is thirsty, constipated, and restless, the nurse, whatever the condition of the secretion of her milk may be, must be changed without hesitation. 7. Let the change be made at once, for all delay is injurious to the child. 8. A nurse's milk should entirely suffice for the child; but when the mother's milk does not do so, it should be made up, not by food but by other milk—it being a popular error that the two milks do not agree. 9. It is not rare to find, in nurses having apparently abundance of milk, that this undergoes on their first arrival a considerable diminution. Regret at leaving their own child and home, different mode of life, and the irritation of the gland by the suckling, are the causes of this inconvenience, which ceases if we wait quietly and encourage the woman. 10. The only test of the goodness of a nurse is the condition of the child. The state of its stools testifies to the quality of the milk, and the amount of urine to the quantity. 11. Except during the first few days, suckling every two hours is most suitable; for a too frequent and a too seldom application to the breast are alike injurious to the condition of the milk. For the sake of rest, a pause of five or

six hours should be secured at night. 12. The appearance of the menses while suckling, if not accompanied by an abiding diminution of the milk, is not hurtful to the infant. 13. Suckling from a suppurating breast is not without danger both for the infant and the nurse. 14. The period for ceasing suckling, or for combining feeding with it, cannot always be determined beforehand. Neither the age of the child or the presence of a certain number of teeth can alone determine this. Of not less importance are the state of the health and development of the infant, and its longing for other food, accompanied, as this sometimes is, with a remarkable indifference to the breast itself. The time of year, the condition of the nurse, and especially of the secretion of milk, have also to be taken into consideration. 15. The wide-spread opinion that cow's milk is more suitable in the spring, owing to the character of its food, is without foundation, as the milk is often then purgative; while in the autumn it often undergoes an advantageous chemical change. 16. Gradual weaning, when possible, should always be preferred. 17. When suckling is impossible, cow's milk offers the best substitute. 18. The artificial feeding of children, properly managed, does not lead to such unfavourable results as usually supposed; but it is more troublesome and often more expensive than a nurse. Children so brought up may appear during the first six or nine months more imperfectly nourished than sucklings; but after that period they regain their size, and no difference can be detected between them. 19. It is always a great advantage for children who are to be brought up by hand, if they can be suckled during the first weeks, if even only partially. 20. We cannot lay down any absolute rules for artificial feeding, which requires adaptation to individual cases. The thriving of the child, the condition of its bowels, and its quietude or restlessness must be our guides. 21. The chemical analysis of milk shows especially that this secretion is liable to great individual quantitative and qualitative varieties, dependent upon a great variety of circumstances. Hence, the remarkable differences found in the examinations of the milk made by different chemists, and the difficulty in constructing a scale of the various kinds, according to the amount of their constituent parts. 22. Every addition to cow's milk should have for its object the rendering it more similar to human milk, and, consequently, more digestible. 23 and 24. Much importance is not to be attached to always obtaining the milk from the same cow, or to the cow being fed on dry food (hay, etc.). 25. The morning's milk is preferable, not only because it is fresher, but because it contains notably less fat and casein. 26. Warming the milk when it cannot be given just after milking is desirable; for it otherwise gives rise to flatulence, diarrhoea, or constipation, or at all events, to a most offensive smell of the evacuations, which at once disappears when the milk is given boiled. During the boiling a caseous membrane is formed, which, protecting the milk from the access of the air, causes it to keep better. 27. Skimmed milk is not suitable for infants. Cow's milk does not contain much more fat than human, and the quantity is easily diminished by dilution. Skim milk is not only too poor in fat, but it is too old; for, having stood so long to yield its cream, it has undergone certain chemical changes. As a general rule, it is an error to forbid children fat, butter, etc., in their diet, as we thus prohibit an important article of nutrition, that appears essentially to contribute to the assimilation of albumen and its modifications. Both substances are found in the maternal milk, the fat being more abundant the shorter the time that has elapsed since delivery. Fat is also an important medicinal agent in diseases such as scrofula and rickets, indicative of a defective nutritive process. 28. Cow's milk in general contains very little more solid constituents than human milk, and the dilution usually made is not theoretically justifiable; and, at all events, this should never be carried so far that the child takes only one-half milk. Cow's milk is not rendered indigestible by the absolute amount of solid constituents, but either by their chemical condition or their proportions to each other being different, neither of which conditions is influenced by dilution. Not only does too great dilution deprive the child of nutriment, but it renders the milk more indigestible, for the author's experiments have shown the more diluted the milk the more firm does its coagulum become. He has seen many children thrive well when fed from their birth upon undiluted milk, and especially when they could drink it fresh; and if given diluted at all, not more than a fourth, or at most

a third of water should be added, to be left off after some months. 29. Among all the differences between cow's and human milk, the proportion of caseum is the most important. for not only is this more abundant, but it coagulates with more difficulty. While that of human milk coagulates into a loose, flocculent jelly, the caseum of cow's milk hardens into large firm lumps, which are with difficulty soluble, easily disturb digestion, and are often found unchanged in the stools. This alone constitutes the difficulty in nourishing infants upon cow's milk, and it also forms the best test for ascertaining the suitable digestion of the milk. To remove this by coagulation, and feed the infants upon the whey, would be to deprive the milk of some of its most precious constituents. Our object must be to render the coagulum as little firm as possible. Dilution only renders it more so, while the addition of half a teaspoonful of pulv. acaciæ to each cup of milk exerts a very good effect, the coagulum then taking in the appearance of a loose jelly. Such milk is well borne, and the undigested lumps of caseum are no longer found in the better-coloured stools. 30. Human milk is sweeter, and the addition of sugar to cow's milk is the more required the more diluted this is used. Sugar of milk is most to be preferred, although it sweetens less. Its sweetening power is, however, increased by the addition of a minute quantity of salt. 31. Addition of salts to cow's milk is unnecessary, as these are already more abundant than in human milk. In order to prevent acidification of the milk, and especially in summer, it is desirable to add a little chalk before boiling the milk, or, in the case of constipation, magnesia. Cow's milk requires as little assistance from other articles of diet as does the human milk. When the development of the child is sufficiently advanced, and especially if several teeth have appeared, vegetable nutriment may be added, as biscuit, or roll, and, later, gruel. These substances should be well soaked in water or weak broth, and a little salt, not sugar, added as a condiment. 33. If the sucking infant is the subject of diarrhoea, we must not all at once alter its food, but rather change the diet of the nurse, or if necessary employ another. When the employment of cow's milk with farinaceous or gummy substances cannot be borne, and an exhausting diarrhoea continues, we should substitute raw yolk of egg in a decoction of grits.

Journal für Kinderkrankheiten, Band 26, pp. 299—309.

CASE OF IMPERFORATION OF THE BODY OF THE UTERUS.

M. Guyot presented the uterus taken from the body of a woman, aged 42, who had died of internal strangulation. As she had never menstruated, the genital organs were carefully examined. The ovaries on each side contained numerous *corpora lutea*. The cervix uteri was permeable from below upwards, and then terminated in a *cul de sac*. The cavity of the body of the organ consisted of a cyst filled with a rusty-coloured fluid, having no communication externally.

M. Cruveilhier had once seen a case in which the body of the uterus was imperforate, as in the present. It is a remarkable circumstance, that while in menstrual retention caused by an imperforate state of the hymen or vagina, blood accumulates behind, and sometimes forms a large tumour; in these cases no considerable accumulations are observed. In the present case there were not present any of the sympathetic phenomena usually observed at the menstrual periods, as abdominal pains, swelling of the breasts, etc.

Bull. de la Soc. Anat. 1856, p. 329.

EXCERPTA MINORA.

Arrest of Hiccough.—M. Geysers states, that an unfailing mode of treating this affection when obstinate, and whether idiopathic or symptomatic, consists in making more or less forcible compression, for a few seconds or even a minute or two, at the inner extremity of or upon one or both clavicles. He suggests that this may operate by its influence upon the phrenic nerve. M. Latour refers to a case of obstinate hiccough, which was immediately relieved by the employment of chloroform.—*Union Médicale*, No. 157.

Treatment of Itch.—M. Fischer strongly recommends for this purpose, instead of the sulphur ointment, the employment of a lotion consisting of caustic potass 1, distilled water 12 parts.—*Ibid.*

Application of Caoutchouc to Umbilical Hernia in Infants.—M. Demarquay observes that although this hernia is usually very easily managed, every one meets with cases in which the

ordinary means fail to retain it. In several such he has employed with great advantage a little apparatus constructed by M. Gariel. It consists of finely prepared vulcanized caoutchouc, having the shape of a nipple shield, and filled with air. The projecting part retains the hernia just as the finger would do, and over the base a slip of diachylon is passed around the body.—*Bull. de Thérap.*, Tome LI., page 534.

Disease of the Liver in Puerperal Fever.—M. Tarvier exhibited to the Society portions of the liver taken from women who had died of puerperal fever, which he believed showed changes not heretofore described. These patients had in general presented the symptoms of asphyxia and cyanosis: some dying within twenty-four hours, and others after three or four days. The liver was found large, very soft, and fragile. The surface when torn exhibited a mamelonated appearance. Two substances were discernible by the naked eye; the one of a greyish, the other of a deep red colour. Fat existed in abundance, the microscope exhibiting very numerous droplets, free amidst the parenchyma.—*Bulletins de la Société Anatomique*, 1856, p. 165.

Diagnosis of Peritonitis when Umbilical Hernia exists.—M. Cruveilhier states, that when in the adult an umbilical hernia is present, it may often be of utility in the diagnosis of inflammatory diseases of the abdomen. Tenderness of or effusion of serosity into its sac will often indicate to us a commencing ascites, and lead to the diagnosis of acute or chronic phlegmonia of the peritoneum.—*Archives Gén.*, Jan. 1857.

FOREIGN CORRESPONDENCE.

FRANCE.

[From our Paris Correspondent.]

PARIS, January 17, 1857.

MEDICAL and surgical practice is almost everywhere in France a close imitation of the rules framed by the principal Physicians and Surgeons of Paris. The provinces number certainly several men of great merit, whose practical views are original and conspicuous; but among them two or three great Practitioners alone are in the habit of writing for the periodical press, or of reporting to the Medical Society the results of their experience and observations. Now and then a book is printed, full of good directions and clever suggestions. A short notice of it is given sometimes in our newspapers; after that, all is said, and the volume sleeps on the shelves of the bookseller. In our time all authors must obey the common law. A book to be bought and read must excite much curiosity and interest, and it can do that only if its author meets a friendly welcome in the newspapers of the metropolis. Now, for provincial inhabitants it is not an easy matter to get in the Parisian journals. Two men only, Sedillot of Strasbourg, and Bonnet of Lyons, have a ready access to the great publications, and it must be acknowledged that they often make use of the right. Everywhere else intellectual motion, I do not say intellectual work, slumbers.

Among the towns of the provinces, Strasbourg, Montpellier, Lyons, Bordeaux, have their own Medical newspapers; Nantes, Metz, Marseilles, etc., publish every year the reports of their Societies; but all these publications have a very limited circulation, and most of them have no original observations, interesting discussions, and communications in a true scientific character. The true aim for reputation is in the metropolis. We have not in this country such places as Edinburgh, Dublin, Glasgow, etc., which form in Great Britain distinct centres of Medical education. Our Schools of Medicine, scattered in the *Départements*, are excellent institutions for learning the elementary notions and the first rules of practice; till now, none of them has displayed any independence of views and principles, nor has succeeded in forming a focus of intellectual work.

I have spoken of Sedillot and Bonnet, two Surgeons of great practice and skill; they would rank certainly with our first men in Paris; they are both corresponding members of the Institute (Academy of Sciences). Among the Physicians I must not omit Forget of Strasburg, Gintrac of Bordeaux, and Cauvière of Marseilles: the first much known by his works on typhoid fever, and on the diseases of the heart; the second, author of a valuable work on general pathology; the third, the most eminent and the elder of the Physicians of the South of France.

I think this summary notice will be sufficient to give to your readers unacquainted with the progress of Medical Science in France a general idea of its causes and manner of development. I shall have many occasions to relate minutely the different circumstances of our public scientific and educational movements. To-day I am very short upon that subject, because I have just received a book of great practical purport, and written by a masterly hand, upon a little-known disease of the throat and air-passages. (a) In that treatise, the author, Noel Gueneau de Mussy, Physician of the Hospital of the Pitié, Assistant-Lecturer at the Faculty of Medicine of Paris, has embodied the very few observations which had been made during the last ten years upon a chronic kind of sore throat by Professor Chomel in 1846 (*Gazette Médicale*), and by Horace Green in America. The name of Glandular Angina was given to that disease by Chomel in his clinical lectures.

Dr. N. Gueneau de Mussy gives an accurate description of the symptoms, and of the anatomical alterations. He has represented in a plate the principal visible characters of the disease; he has added to the observations already published several facts of great importance upon the origin, the nature, the causes and the treatment. To the book is prefixed a preliminary discourse upon the Diatheses, and in particular Herpetic Diathesis. I know few essays so remarkable as that Introduction,—one of the best articles on general pathology that I have read for some time. The author shows the conditions of the diagnosis of diathetic diseases, and the value of therapeutical indications given by those symptoms; he defines afterwards the herpetic diathesis, relates its etiological conditions, and describes the course of its phenomena.

In the last part of the book, in speaking of the treatment, Dr. Gueneau de Mussy says: "We have established that, in the greatest number of cases, the chronic glandular angina, independent of tuberculous diseases, is in a close relation with cutaneous affections. The treatment must then be directed not only against the local alteration, but also against the general condition of the organism which produces the disease." Among the different systems of general medication, none has given so many good results as the use of sulphurous waters. At Eaux Bonnes the author has observed several remarkable cures of these diseases; and he justly insists upon the method of sulphurous baths, drinks and gargles. The good effects of these curative means show that the nature of the sore throat is in these cases quite different from that of tuberculous or syphilitic angina, which have each of them their peculiar symptoms, and require different therapeutical indications.

After these remarks upon the book of Gueneau de Mussy, a word upon the discussion of the Academy of Medicine. For two months past the Academy has tried to establish some principles upon the best mode of treatment of ovarian cysts. Many speeches have been heard, but no question has been settled yet upon that subject.

GENERAL CORRESPONDENCE.

PROTRACTED BIRTH OF THE SECOND TWIN.

[To the Editor of the Medical Times and Gazette.]

SIR,—I shall be obliged by your inserting the following case in your widely circulated Journal, as being one certainly of very uncommon occurrence, and that may throw some doubt on the period of utero-gestation.

I was called to attend Ann Rogers, residing at Menhericott, near Liskeard, on February 2, 1851, in her first labour. The presentation was natural, and she was delivered of a moderately sized child in about an hour from the commencement of labour. I found afterwards the funis was tense; and, on examination, discovered evidence of another child. I ruptured the membrane, and about half-an-hour after a severe pain brought the placenta. I remained with her several hours, during which there was no pain nor flooding. I then left her, with a request that she would send for me on the recurrence of any symptom of labour. She lay in bed three or four days, fully persuaded in her mind there was another child to come. She then came down and moved about, not having a single pain until the Sunday after, which was

(a) *Traité de l'Angine Glanduleuse, et Observations sur l'Action des Eaux-Bonnes dans cette Affection; précédées des Considérations sur les Diathèses.* Paris: Victor Masson. 1857.

exactly one week from the birth of the first child; when, after a very few pains, the second was born before I could come to her. The placenta came without difficulty half-an-hour after, and the mother and two children did well. The second child was decidedly the finest of the two.

I am, &c.

ALFRED PRIDEAUX.

Liskeard, January 19, 1857.

DRY AND WET CLEANSING OF HOSPITAL WARDS.

[To the Editor of the Medical Times and Gazette.]

SIR,—Permit me to call your attention to an evil of no ordinary magnitude. I allude to the constant washing of the floors of our large hospitals. I rarely go into the wards of the hospital which I attend, between the hours of 8 a.m. and 8 p.m., without finding a portion of the flooring undergoing the washing process.

It seems to be a general opinion that the evaporation of water, which is thus always in operation during twelve out of the twenty-four hours, tends to spread the materies morbi of several infectious diseases. I have lately seen a case of erysipelas communicated as I believe in this manner.

May I suggest, through the medium of your columns, the adoption of the system of dry rubbing used on the decks of emigration vessels, or where the floors are constructed with oak boards, the Parisian system of polishing.

I am, &c.

STUDENS.

POISONING BY STRYCHNINE.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the last week's *Medical Times and Gazette* you have commented on the case of suicide by strychnine, which was reported in the daily newspapers about two weeks since, and came under my Professional charge.

In the *Times'* report of my evidence at the inquest there is an inaccuracy in the statement that I had found traces of poisoning in the stomach.

I stated that all the organs of the body presented such an appearance of health that it was impossible for me to state the cause of death, but the fact that a phial was found in her box marked "strychnine," and a cup which deceased had apparently used with this poison in just before, must have led some one to the premature conviction that she had taken strychnine; but this was not thought sufficient evidence to arrive at a conclusion, and the Coroner adjourned the inquiry for an analysis of the contents of the stomach; and for the sake of Medical scientific research I beg to forward you the particulars for insertion in your Journal, if you deem them of sufficient interest.

Post-mortem appearances, half-an-hour after death.—I found deceased stretched out on the floor, lying perfectly straight, and her arms by her side; countenance bore a calm expression; mouth slightly open, and nothing to attract notice about the cavity; eyes closed, pupils dilated; fingers semiflexed, and very rigid, having a very livid appearance, the lividity extending up to the elbows. All the limbs were flexible, and there was no muscular contortion whatever.

Post-mortem examination, 58 hours after death.—Putrefaction had not commenced, nor was there any ecchymosis on the skin, about the nates or scalp. Limbs flexible; fingers retained their rigidity; muscles very soft, and full of dark blood. On separating the scalp, a large quantity of tarry-looking blood escaped; the membranes of the brain and upper part of the spinal cord were much congested. The brain was firm in structure, and much congested throughout; there was no clot in, nor extravasation into the ventricles. Heart flabby, the left ventricle empty, with the exception of one or two small coagula; right side full of blood, and all the vessels about the region of the heart were full of dark fluid blood. Lungs healthy in structure, but very much congested, and a bloody froth exuded from the surface when cut into. Stomach full of partly-digested matter, such as meat and vegetables. Mucous surface healthy and pale throughout its whole extent. Liver rather larger than natural, but not congested. Gall-bladder full of bile; and all the other viscera of the abdomen were healthy.

Analysis.—I took half the stomach, cut in small pieces, and about one-fifth of its contents, and satisfied myself that strychnine was present in this mass by digesting it with

acidulated water and straining; the taste then gave the characteristic bitter. I now proceeded to procure a chloroform solution of strychnine, by the process recommended by Messrs. Rodgers and Gordwood, and on evaporating this solution procured about three grains of pure strychnine. To satisfy myself of this result I applied the sulphuric acid and bichromate of potash test, which immediately gave the violet hue. I likewise made a small flesh-wound in the shoulder of a rabbit, and rubbed in about two-thirds of a grain. Tetanic twitchings came on in about a quarter of an hour, which gradually increased in violence until the back was so much arched that the head and tail nearly touched, and the animal died in convulsions forty-five minutes from the commencement of the experiment.

I do not see anything very exceptional in this case from those already recorded.

The most important features of the case have not been revealed, as deceased was alone when she committed the act, and was not discovered until found in the state described; therefore, if convulsions had occurred, she had afterwards the calm aspect she presented on death supervening.

I am, &c.

GEORGE HAZEL.

7, Crawley-street, January 15th, 1857.

P.S.—I regret that my letter of the 17th instant was not received in time for your publication in the *Medical Times and Gazette* of the same week, and I beg to say that that report is very hurriedly got up, from my time being so much occupied.

I have tested the powder contained in the bottle, and cannot discover anything in the form of chalk. Chloroform entirely dissolves it, and the preparation gives strychnia, with brucia, on applying the usual tests; and I believe that strychnia is very difficult to procure from the druggists without this impurity.

I beg to enclose for your inspection a small portion of the contents of the bottle.—G. H.

Crawley-street, N.W., January 21, 1857.

PREVENTION OF PITTING IN SMALL-POX.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the last number but one of the *Medical Times and Gazette*, Dec. 13th, I observed a paper by Alexander Roward, Esq., M.D.E., "On the prevention of 'pitting' in small-pox, by a strong solution of nitrate of silver."

Dr. R. relates a case of small-pox in a man he attended, at the Marine and Emigrant Hospital, Quebec. In my "Observations on the use of the nitrate of silver," with full directions for its use as a therapeutic agent, published by Mr. Churchill in 1850, Dr. Roward will find that I have, for some years, anticipated him in applying a strong solution of the nitrate of silver all over the face, to prevent the pitting of the small-pox, with this difference, that the solution I have employed has been more than double the strength of the solution which he used, being eight scruples to one ounce of distilled water.

The following are extracts from my work:—

Page 25, of Variola.

"If the eruption be distinct, the solid stick of the nitrate of silver should be applied on each pustule, previously moistened with a little water. If confluent, the concentrated solution must be applied over the whole surface, as directed in erysipelas, and, if necessary, to the whole of the scalp, (the hair being previously removed,) and to the ears, the neck, or any other part where it may be thought necessary. The application should be used on the second or third day of the eruption. If any part should be untouched on the succeeding visit, it must be applied to those parts."

Page 36.—In preventing the pitting of small-pox:—

"Having observed some years ago, that the nitrate of silver had been used on the Continent by MM. Delpeau Bretonneau and Serres, for the purpose of preventing pits and scars consequent on small-pox, I was induced to apply it as they directed, by puncturing the centre of each vesicle with a needle, and then applying the solid stick of the nitrate of silver. I found it effectual in preventing any further progress of the pox. The next patient on whom I used the nitrate of silver was a strong, healthy young man, about 20 years of age, with confluent small-pox. I punctured a few of the vesicles on the face, but these being very numerous, I satisfied myself with applying the concentrated solution over the whole surface of the face where they were most confluent, without making any punctures.

"The solution answered as well as where the punctures had been made, in arresting the progress of the eruption.

"The next case of confluent small-pox was one where no punctures were made,—Mr. P., a young man of 19 years of age, and of delicate constitution. From the confluent state of the pox, I should have expected deep pits and scars on his face. I applied the concentrated solution on the whole of the face and the ears, in the same manner as recommended in erysipelas.

"The vesicles of the pox were immediately arrested in their progress, and in four days presented small hardened eschars free from inflammation, while the pustules on the body were gradually proceeding to suppuration. In about nine days, the eschar had come away from the face without leaving pits.

"In this case the nitrate of silver not only prevented the pits, but the inflammation, irritation, and offensive suppuration which are so distressing to the patient.

"If thought necessary, the nitrate of silver might be applied all over the scalp, as in erysipelas, to prevent cerebral inflammation.

"It might be applied on and within the cavity of the ear, to prevent otitis, and on the conjunctiva, to prevent ophthalmia.

"I have used as a gargle to the throat, in small-pox, with great benefit, a solution of a scruple of the nitrate of silver, in three ounces of distilled water.

"It appears that MM. Delpeau Bretonneau and Serres used the solution of the nitrate of silver over the whole surface of the small-pox, 'but it was found that, employed in this manner, the salt was utterly useless; that it masked the progress of the eruption from sight, without impeding its development.'"

The failure must have arisen from using *too weak a solution*. I avail myself of this opportunity to say that the daily practice of more than half a century has confirmed me in the opinion of the great value of the nitrate of silver in the cure of inflammation, wounds, and ulcers.

I am, &c.

JOHN HIGGINBOTTOM.

Nottingham, Dec. 1856.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

JANUARY 13, 1857.

Dr. WEBSTER, F.R.S., V.P., in the chair.

Mr. SOLLY stated, that at the last meeting of the Society he had obtained further information respecting his case, which was then read. He had seen the gentleman who attended the patient in her confinement, and had received from him an account and drawing of the case, the latter being executed three weeks after the child's birth. A careful examination of the child had been made, and no connexion could be traced between the tumour and the occiput. Mr. Vincent had, after examination, come to the same conclusion, and regarded the case as one of spina bifida.

A paper by Dr. Jenner was then read,

ON THE DETERMINING CAUSES OF VESICULAR EMPHYSEMA OF THE LUNG.

After referring to the importance of ascertaining the determining cause of pulmonary vesicular emphysema as a guide for its prevention, and to the predisposing influence of all changes in the structure of the lung which impair its contractility, the author adverted to the fact, that the only force capable of unduly dilating the air-cells called into play during respiration is the pressure of air on their inner surface. He then briefly recapitulated the inspiratory theory at present generally received, and quoted the following passage from the latest exponent and most powerful advocate of that theory:—"The act of expiration tends entirely towards emptying the air-vesicles, by the uniform pressure of the external parietes of the thorax upon the whole pulmonary surface; and even where the air-vesicles are maintained at their maximum or normal state of fulness by a closed glottis, any further distension of them is as much out of the question as would be the further distension of a bladder blown up and tied at the neck by hydrostatic or equalized pressure applied to its

entire external surface."(a) The object of his paper, Dr. Jenner stated, is to show, in opposition to these views, that the force called into play by powerful expiratory effort is by far the most common and efficient cause of vesicular emphysema of the lung. Powerful expiration is, Dr. Jenner affirms, infinitely the most frequent determining cause of acute vesicular emphysema, and of the chronic vesicular emphysema which accompanies chronic bronchitis. It is probably the constant determining cause of the vesicular emphysema which supervenes on chronic congestion of the lungs and bronchial tubes, and on diseased heart, and of the atrophous emphysema of the aged, and the invariable determining cause of vesicular emphysema whenever it is general, or occupies chiefly or only the apex and border of the lung, and whenever the dilatation of one or more vesicles is extreme. Dr. Jenner denies that during expiration every part of the lung is equally supported and equally compressed, and he affirms that the apex, the anterior margin, the margin of the base, and some parts of the root of the lung, are at once imperfectly supported, and comparatively or absolutely little compressed only during expiration. The thoracic parietes covering those parts of the lung which are the least supported and compressed, are those which are seen when a person makes a powerful expiratory effort with a closed or imperfectly open glottis, as in whooping-cough, croup, and hypertrophous emphysema, to be driven outwards. These same parts are the most common seats of emphysema. Three cases are detailed by Dr. Jenner in illustration of his position. In proof of the force exerted on the air-cells of the lungs when powerful expiratory efforts are made with a closed glottis, mention is made of the well-known fact, that during the expulsive efforts of labour one or more cells occasionally give way. In a postscript, the author mentions that he had examined several horses for the purpose of ascertaining whether the parts of their lungs affected with vesicular emphysema were situated in those parts of the thorax the least supported and compressed during expiration, and that in all he found such to be the case.

Dr. SIBSON referred to a paper published by him in 1844, in which he espoused at considerable length the inspiratory theory, which was opposed to that brought forward by Dr. Jenner. He had attempted, however, to disembarass his mind as completely as possible of his previous views, while listening to Dr. Jenner's paper; but he confessed that those views had not been in the slightest degree modified by what he had heard. It had been stated that in emphysema, during coughing, the lung rose up into the neck, and above the clavicle; but he maintained that it was not the lung that then rose, but the large venous sinuses of the neck that were largely distended. Dr. Jenner said that, during inspiration, there was a falling in of the lung at that part, but he (Dr. Sibson) contended that that arose from the opposite cause to that alleged, namely, the blood being prevented from entering into the right side of the heart. The upper part of the chest was not, as stated, that which least supported the lung during expiration, it being, as he was able to prove, the most supported part in all animals that breathed with the diaphragm. In all such animals, with the exception of the ant-eater, (in which the first rib resembled that of birds and reptiles,) the upper rib was the strongest of all. In animals that did not breathe with the diaphragm the upper ribs were not included in the sternal set, those commencing lower down; but in animals that breathed with the diaphragm the lung was drawn forcibly down, and were there not an enormous counterpoise it would be drawn inwards at each inspiration, so that there would be a large chasm in the upper part of the chest and the lower part of the neck, instead of the lung being expanded equally in every direction. The upper rib was the strongest; it had muscles of great power acting immediately upon it, inclosing the lung in a muscular case of great firmness, which, during inspiration, while it drew up the ribs (particularly the first and second) also drew up the upper part of the lung; and there was a small muscle acting upon the portion of cellular tissue outside the pleura, to draw up the apex. The muscles yielded but little during expiration. Putting them aside, however, there was but a small portion of the apex above the anterior part of the first rib, the more important part of it lying upon the first, second, and third ribs. That was a part eminently the subject of emphysema; and it would be found, by post-mortem exami-

(a) Dr. Gairdner's Monthly Journal of Medical Science, vol. xiii. 10.

nation of cases of emphysema, that there were no cases in which so small a portion of the lung was superior to the first rib; while in no cases was there so large a portion as in cases of phthisis. He was convinced that if Dr. Jenner would examine his position with increased care, he would modify the views he had expressed. The idea of the lung being variously supported during expiration was opposed to the commonest law of physics, that of the pressure of fluids being equal in every direction. It was true in reference to the ribs, cartilages, diaphragm, liver, &c., that some of them were more yielding than others, but they were all less yielding than any part of the texture of the lung itself. Dr. Jenner had rightly said that the lowest part of the lung in front was the part that fell in during inspiration in emphysema, but there was a portion at the upper part of the sternum (the whole of the two upper thirds) more emphysematous than any other, and that was the portion more expanded during inspiration in emphysema, and the most pressed out during expiration. At the lower part of the sternum it fell in, and the expansion there at all events could not be by expiration. At the lower part the lung was exceedingly lengthened downwards in every case of emphysema, sometimes by an inch or an inch and a half. The form of the chest in emphysema was inspiratory; the shoulders and sternum being raised, the neck shortened, the head dropping, the scapulæ raised upwards away from the chest, the walls of the chest universally expanded except over the lower region, and surely it was not rational to conclude, since the form was inspiratory, that the cause of emphysema was expiratory. He thought, however, that there was an expiratory cause when the emphysema assumed a certain form familiar to pathologists, that of a peculiar sacculated projection. In those cases the cells were greatly swollen, in consequence of the impossibility of the escape of the air from the bronchial tubes during expiration. During inspiration the tubes were being widened, and the facility of expiration was gradually diminished, so that a large part of the air inspired could not get out. But he maintained that the usual cause was inspiratory. In one or two post-mortem examinations he thought he had traced another cause, namely, the confinement of fluid within certain lobules, thus enlarging, and sometimes bursting them. Such cases, however, were very exceptional. He did not think the expiratory theory was at all affected by the paper of Dr. Jenner.

Dr. EDWARD SMITH remarked, that the author's theory was not so opposed to that ordinarily received as the antithesis of the terms inspiratory and expiratory, and the author's denunciation of the inspiratory theory seemed to imply; since on both theories the disease is produced by the forcible entrance of air into the cells. The disease is not produced by or during expiration; since it is essential, on the author's theory, that the glottis should be closed; and hence, when expiration is permitted, the production of the disease cannot occur. The occurrence of the disease with cough (that is, under the conditions mentioned by the author) has long been admitted by the advocates of the inspiratory theory; and since the essential act in the induction of the disease is the introduction of air into the cells, he would regard the author's theory simply as a modification of the inspiratory, notwithstanding that the power employed is that which, with the glottis open, would be expiratory. The author's theory is one of compression and dislocation of the contained air, and not of expiration. In cases of chronic bronchitis he believed the disease to be often directly induced by inspiration. In that disease there is obstruction to the entrance of the air, from the retention of an excessive volume of the residual and reserve air, whereby the cells remain at all times too much distended; and the dyspnoea is mainly owing to the fact that a sufficient quantity of tidal air cannot gain access to the air cells, while the residual and reserve air becomes effete by reason of insufficient change. Hence the efforts to inspire are unusually forcible and sudden, while the movements of inspiration are unusually small, so that a greater pressure must be exerted upon the column of air in the air-cells than is found in health; and thus at the points the least supported or enfeebled by disease, and also at those the most in the line of the inspiratory power, the cells will dilate.

Dr. SNOW said he paid some attention to the subject of emphysema about fifteen years ago, and at that time he advocated the opinion that this lesion could only be produced during inspiration. At that time, however, he took it for granted that the chest was a cavity equally supported at all

parts, when the pressure would, of course, be equal in all directions, and distension of the air-cells during expiration would be impossible. The circumstance pointed out by Dr. Jenner, that the resistance was less above the clavicles than at other parts, altered the question a little; but he still considered that the air-cells of no part of the lungs could be distended during expiration. In order that the air-cells of the upper part of the lungs should be distended during expiration, it would be necessary that the air should be entering the bronchial tubes at this part, while it was leaving the bronchial tubes of the other parts of the lungs, but he did not think that the structure of the bronchi would allow of air being pressed in this manner; he thought they would sooner collapse by the pressure.

Dr. WEST thought that previous theories as to the cause of emphysema needed some such modification as that suggested by Dr. Jenner, to account for the frequent occurrence of emphysema in children in cases of hooping-cough and croup, independent of bronchitis. He did not coincide with Dr. Jenner as to the rarity of the occurrence of emphysema in cases of pneumonia, having observed its occurrence, especially in early life, in many such cases, to an extent proportionate to the rapidity with which the pneumonia had set in.

Dr. HEWITT had examined the lungs of infants who had died from bronchitis, or diseases in which bronchitis found an essential ingredient, and had frequently observed the presence of vesicular emphysema. He had not observed that emphysema was limited to the upper lobes, as mentioned by Dr. Jenner, but had found it scattered over the surface of most of the lobes; and the degree in which it existed in particular parts seemed to be in almost direct relation to the degree in which that condition of the lungs was present, known as collapse or apneumotosis. In fact, observing that condition present to a great degree, he could almost confidently predicate the existence of a considerable amount of emphysema. His observations, therefore, did not tell in favour of the explanation which Dr. Jenner had offered.

Dr. BARCLAY thought both parties were in error in regard to the physical explanation, one urging that there could not be any pressure upon the interior of the vesicles during inspiration, and the other, that there could not be pressure upon the exterior of the lungs during expiration. If at any time the lung structure was not sufficiently expanded as to fill the chest when the chest was expanded by inspiration, an unequal pressure would be exerted by the atmosphere upon different parts, the weakest portion of the lung would give way, and vesicular emphysema be formed. Dr. Sibson was in error in saying that the pressure during expiration was equally exerted by the ribs and the soft structures. When the pressure was produced by the rib, the intermediate soft structure gave way and bulged; and there was nothing to prove it impossible that the lung should give way in parts where the chest was weakest, vesicular emphysema being then formed by the forcible compression of the lung structure during an expiratory effort with a closed glottis.

Dr. SIBSON explained that he only stated that, while the different parts of the chest yielded in different degrees, they were none of them so yielding as the lungs themselves. He agreed with the position laid down by Dr. Barclay.

Dr. BLACK dissented from the views of Dr. Jenner. He stated that the apices of the lung were the parts most prone to distension, and argued that that was attributable to the comparative immobility of the part; but he (Dr. Black) could not see how the inference drawn by Dr. Jenner could be maintained. If the lungs were spherical they would expand equally in all directions, but as the apices were in the most contracted part, of course there would be the least expansion there, which was merely the exact harmony of the part to the substance that had to be expanded.

Mr. J. HUTCHINSON suggested that both the respiratory and the inspiratory theories might be true; and that Dr. Jenner's theory would be more easily understood, and be more likely to be received, if, instead of speaking of irregular support, he had spoken of irregular compression. With regard to the equal pressure of fluids in all directions, that law only applied to fluids at rest.

Mr. BROOK said, the only disturbance of that law would be the momentum of the air, which was very slight, and could not be increased by any contrivance that might be attempted. Suppose an inflated lung to be enclosed in an India-rubber bottle, and subjected to pressure, that part would give way

where the bottle was weakest, and would (he apprehended) become emphysematous.

Dr. JENNER briefly replied, stating that he did not exclude the inspiratory theory, which he had no doubt was applicable in certain cases, especially to those mentioned by Dr. Hewitt.

Dr. PEACOCK said, he believed that Dr. Jenner's views were applicable to the explanation of the mode of origin of some forms of emphysema of the lungs, but that there were others which were readily explained on the respiratory theory. He observed, that Dr. Jenner regarded the acute emphysema of infants as certainly produced by violent respiratory efforts. If, however, Dr. Jenner meant his views to be extended to the acute emphysema of adults, Dr. Peacock could not coincide in that opinion. The acute emphysema which occurred in acute capillary bronchitis he regarded as much more readily explained on the inspiratory theory. In that disease one of the peculiar features was the abortive character of the cough, whereas the existence of collapse of the lungs in such cases readily explained the presence of emphysema.

Dr. JENNER said, that acute emphysema in children was not peculiar to cases of bronchitis. He had seen cases of acute emphysema in which there was little or no collapse.

THE PATHOLOGICAL SOCIETY.

TUESDAY, January 6, 1857.

(Continued from page 75.)

Mr. ARNOTT, President, in the Chair.

Dr. BARKER showed the lungs from a case of

PNEUMOTHORAX.

The patient, a man, had been for some time the subject of phthisis, and had shown the signs of a very large cavity in the left apex. He recovered sufficiently to resume his work; and one day, while engaged in heavy labour, suddenly felt extreme pain in the chest. Severe collapse followed, and an agony of dyspnoea. By degrees the breathing became more tranquil, though still very rapid. It was found that there was a tympanitic percussion note over parts of the chest previously dull. He died six days after the occurrence referred to. The lung was found closely united to the ribs, at its apex, and as low down as the fourth rib. Two pints of fluid and much air occupied the lower part of the pleural sac. One of the cavities in the lower part of the lung had ruptured into the pleura.

Dr. BARKER exhibited also a specimen of

DISEASED HEART.

The aortic semilunars were very extensively destroyed, and quite incompetent. The peculiarity of the case was that, notwithstanding this condition, hardly any regurgitant aortic murmur had been audible during life. The pulse had, however, been markedly one of regurgitation.

Dr. HARLEY showed a specimen of

LARGE HEPATIC INTESTINAL CALCULUS.

It had been removed from a cul de sac in the cæcum of a man, aged 87, who had died of old age. It was three inches in length and three and a half in circumference, consisting of inspissated bile coated with cholesterine. It contained 90 per cent. of cholesterine. Since removal it had separated into three segments.

Dr. HARE showed a specimen, exhibiting

STRICTURE AND PERFORATING ULCER OF THE SMALL INTESTINE.

A man, aged 42, from childhood the subject of reducible hernia. Ten weeks before death he had suffered from strangulation of the hernia, which had been reduced by a surgeon on several separate occasions, but always with more or less of continuance of symptoms. He was admitted into University College Hospital, under Dr. Hare's care, with all the symptoms of intestinal obstruction; the sickness being urgent. No hernia could then be found. The depressions between the coils of intestines were easily perceptible through the abdominal walls. Death occurred five hours after admission. At the autopsy the intestines were found much inflamed, and adherent by recent lymph. Three feet above the ileo-cæcal valve was a constriction of the bowel, and just in front of this a diverticulum. The bowel above the stricture was much

dilated, and showed an ulcer three-fourths of an inch long, which had given way at one point. Below the constriction the gut was small and empty.

Mr. SYDNEY JONES showed two specimens of

FOREIGN BODIES REMOVED DURING LIFE FROM THE INTESTINES.

In the first case a child, aged 5, had suffered for some time from pain in the abdomen. At length an abscess formed near the umbilicus, which discharged profusely, at first pus, but subsequently fæcal matters. At a later period the points of a hair-pin were discovered presenting in the wound. The foreign body was extracted by Mr. South, and the child recovered. In the second case a lady had swallowed a fish-bone, for six months after which she suffered from pain in swallowing. Then for six months she was free from all inconvenience. Lastly, an abscess formed and broke by the side of the anus. The operation for fistula was determined upon; and, in the preparatory examination, the operator, Mr. South, discovered something sharp projecting into the sinus. It was drawn out, and proved to be a spinous fish-bone.

Mr. SYDNEY JONES also brought before the Society a specimen showing

INTUSUSCEPTION OF THE INTESTINE, OF NINE WEEKS' STANDING.

The cæcum and small intestine had been invaginated into the whole length of the colon, and had been extruded at the anus. The patient was an infant, about a year old, and at the breast. Its earliest illness had been an attack of obstruction of the bowels, which had lasted with much severity for three days, and then subsided. Three weeks later a second attack of similar character had occurred, and had lasted nearly the same time. Subsequently the gut protruded at the anus, and a length of six inches would be presented externally. Between the layers of peritoneum covering the invaginated tract of bowel were extensive and old adhesions, proving that the condition had existed long prior to death. Mr. Jones alluded to a specimen showing an almost similar state of things which had been exhibited by Mr. Hutchinson in a former session, and in which the symptoms of intus-susception dated back four months prior to death.

Mr. CURLING showed a specimen of

SUPPOSED SCIRRHUS OF THE PROSTATE.

It had been removed from the body of a middle-aged man, in whom the symptoms (retention, vesical irritation, etc.) had existed for one year. Death had at length ensued, from acute inflammation of the kidneys. At the autopsy, the bladder was found hypertrophied, and the kidneys much congested, and showing points of pus and of recent albuminous deposit throughout their cortical structure. The prostate was not very greatly enlarged, but was extremely hard in parts. Its section when first cut across, showed a somewhat cone-shaped surface of yellow and glistening appearance, exactly resembling that of a true scirrhus. It had been seen by Mr. Hutchinson and others at the time, who had coincided with Mr. Curling in the opinion that it was genuine scirrhus. Dr. Andrew Clarke had, however, on microscopic examination, been unable to discover any elements resembling those of cancer. The opinion as to its being such was, therefore, given from its naked-eye inspection alone.

Mr. SIMON remarked on the extreme rarity of scirrhus of the prostate, and suggested that the specimen should be referred to a Committee, for further examination.

Mr. HUTCHINSON stated that, having had an opportunity of seeing the specimen just after removal, he could most fully confirm the description of its naked-eye appearance given by Mr. Curling. He had not, at the time, felt a doubt as to its being scirrhus. He had not, however, had an opportunity for making a microscopic examination.

It was finally referred to Dr. Brinton and Dr. Wilks, for further examination and report.

THE NIGHTINGALE FUND.—The secretaries to the Fund announce subscriptions amounting, up to this time, in round figures, to nearly £40,000. This sum is intended to be "a record of national gratitude to Miss Nightingale, for the invaluable services rendered by her to the sick and wounded of the British forces;" and is raised "to enable her to establish an institution for the training, sustenance, and protection of nurses and hospital attendants."

QUESTIONS AT THE EXAMINATION IN JAN. 1857,
FOR THE APPOINTMENTS OF
ASSISTANT SURGEONS IN THE HON. EAST
INDIA COMPANY'S SERVICE.

ANATOMY AND PHYSIOLOGY.

Monday, January 12.—10 to 1 o'clock.

MR. BUSK.

I. DESCRIPTIVE ANATOMY.

1. Describe the duodenum; its structure, relations, functions, vessels, and nerves.
2. Indicate the limits of, and describe the parts exposed by dissection in the space circumscribed by the borders and attachments of the masseter muscle, including the zygomatic fossa.
3. Describe the dissection of the popliteal space.
4. Enumerate in order of superposition the parts divided in cutting down upon the first rib, above the clavicle, the incision being parallel with the clavicle.
5. The pons Varolii and medulla oblongata having been removed, describe the base of the brain, as thus exposed; tracing the remaining nerves to their true origins.

II. MINUTE ANATOMY AND PHYSIOLOGY.

6. Describe the minute anatomy of the spleen, and the peculiarities of the splenic blood.
7. Describe the structure of the walls of the larger and smaller arteries, veins, lymphatics, and capillaries.
8. Enumerate the various excretions, indicating the average daily amount of each in an adult man; and indicate the sources whence they are derived, and the channels through which they are eliminated.

SURGERY.

Monday, January 12.—2 to 5 o'clock.

MR. PAGET.

1. Describe the malpositions of the lower extremity which are usually observed in the successive stages of scrofulous inflammation of the hip-joint; explain the differences between the apparent shortening and the real shortening of the limb; and say in what other diseases any of the same malpositions may occur, and how these diseases may be distinguished from that of the hip-joint.
2. What are the chief caustics employed in the treatment of phagedænic, rodent, lupous, canceroid, and other allied forms of ulcer? Give an account of the methods of applying at least three of them.
3. Give an account of loose cartilages in the knee-joint,—of their probable origin, seat and manner of formation, and effects.
4. In a large general hospital, would you, or would you not, set apart wards exclusively for the treatment of patients after operations? State both the advantages, and the disadvantages, of the plan that you would adopt.
5. What diseases within the skull are likely to occur in connexion with chronic suppuration or ulceration in the internal ear? How would you endeavour to prevent them? and what symptoms would make you suspect the occurrence of any of them?
6. Give an account of the disease generally called fissure or irritable ulcer of the anus; mention its chief diagnostic symptoms, and the best means of curing it.
7. Enumerate the causes of retention of urine.
8. What are the most characteristic signs of fracture of the neck of the femur? and how would you distinguish this injury from fracture of the pelvis, from dislocation of the femur on the dorsum ilii, and (when there is no shortening of the limb) from the consequences of a severe blow on the trochanter major producing neither fracture nor dislocation?

MEDICINE.

Tuesday, —2 to 5 o'clock, p.m.

DR. PARKES.

1. Describe the symptoms of an apoplectic fit. What are the chief structural lesions of the brain or vessels which precede cerebral hæmorrhage? What treatment would you adopt during the fit?
2. A woman, aged 30, was ill for 3 years with well-marked symptoms of phthisis pulmonalis. She then became extremely depressed in spirits, irritable, and odd in manner, and occasionally lost for a time the memory of persons and things. After this had continued for 2 or 3 months, she began to complain of severe frontal headache, and was soon afterwards attacked with occasional violent vomiting; there was some intolerance of light; the pulse was quick and the skin was

hot. Eight days before her death, she became extremely confused, ceased to know her relatives, declined to answer questions, and gradually became comatose. For 5 days before her death, she had retention of urine, but there were no other paralytic symptoms.

Describe the appearances which would be present in the brain and lungs on post-mortem examination.

3. What are the symptoms of acute Pericarditis?

4. A man, aged 33, suffered for 6 years from cough, expectoration, and occasional slight hæmoptysis. For 9 months before the date of the following attack the cough had increased and he had rapidly lost flesh.

On the 16th December he was suddenly seized with a sensation of great constriction, and then of intense pain in the left side and the left front of the chest; the breathing became very quick; the pulse frequent and feeble; the extremities cold; the skin clammy with cold sweat. The patient could only lie on the left side, though formerly the position on the right side had been easiest to him.

On the following day the pain was less, but was still excited by every respiration and movement; the left side was found to be enlarged, and the heart was displaced to the right.

From what causes could such an attack arise, and which cause was the probable one in this case? What physical signs must have been present? What treatment would you have adopted?

5. What are the causes of enlargement of the spleen? How would you recognise such enlargement? What microscopical conditions of blood may be coincident with it?

6. How would you distinguish between the diarrhoea of typhoid fever, and that of dysentery? Mention the signs derived from the characters of the stools, as well as from the other symptoms.

7. Enumerate some of the principal diseases in which albumen may be found temporarily or permanently in the urine.

8. What are the symptoms and treatment of placenta prævia?

9. What are the chief officinal preparations of iron? Under what circumstances would you employ iron as a remedy?

10. If you were appointed Surgeon to a crowded troop, or emigrant, ship, what measures would you take in order to preserve the health of those on board?

NATURAL HISTORY.

DR. HOOKER.

BOTANY, &c.

Tuesday—10 to 1 p.m.

Answer five or more of the following Questions.

1. What are the different layers of the bark of a tree, and how are they developed?
2. How are Epiphytes distinguished from Parasites? give examples of both.
3. What are the characters of the Natural Orders Gramineæ, Compositæ, and Umbelliferae? and give examples of each used in Medicine.
4. Describe the roots of Ipeacuanha, Orchis, Smilax, and Ginger; give the names and natural orders of the plants to which they belong.
5. Give the names, natural orders, and native countries of the plants producing Gamboge, Hemp, Tamarind, Benzoin, Scammony, and Jalap.
6. Describe the structure of an orchideous flower.
7. What does a grain of wheat and barley consist of?
8. What is yeast, how is it developed, and what are the chemical changes it effects?
9. Mention some natural orders and genera of plants which abound most in saline and nitrogenous soils.
10. Mention some of the most abundant products of the cells of plants, and their chemical composition.
11. What is starch chemically and microscopically? and how is it converted into sugar?
12. Define the terms Protoplasm, Cytoblast, and Primordial Utricle.
13. What are the changes which vegetable food undergoes when assimilated by animals; and how does it supply animal heat?
14. Why is a knowledge of Vegetable Physiology essential to a right understanding of Animal Physiology?
15. What are mist, dew, and hoar-frost?
16. What are monsoons and trade-winds?

ZOOLOGY.

Answer three or more of the following Questions.

1. Describe the process of fecundation in Fish and in Insects.
2. What are the principal races of man; how are they distinguished and distributed over the surface of the globe?
3. What animals yield oil used in commerce and medicine; and to what genera and families do they belong?
4. What is the economy of an ant-hill and of its inhabitants?
5. Define the terms Species, Genus, Organ, Function, Instinct, Anatomy, and Physiology.
6. Describe the respiratory apparatus in Birds, Fish, Reptiles, Insects, and Arachnida.
7. What are Tape-worms and Ascarides; how are they developed and propagated?

On Thursday and Friday, January 15th and 16th, oral examination on all the subjects.

On Saturday, January 17th, clinical examination and operations.

OBITUARY.

JOHN AYRTON PARIS,

M.D. Cantab., D.C.L. Oxon., F.R.S., President of the Royal College of Physicians.

(Continued from page 49.)

Dr. Paris's mental powers, which were naturally strong, had undergone that discipline which a complete University education, and a deep study of chemistry, are so well calculated to impart. His memory was large, and singularly tenacious,—a fact once acquired was never lost—a passage once read he could reproduce at pleasure. The leading feature of his mind was a comprehensive clearness. What he perceived he saw distinctly; what he had contemplated was present to his mind under all its different relations, and with all its varied connexions. He possessed a vigorous imagination and a ready wit; and was keenly alive to the *facetiæ* of human character. His reading had been extensive, but discursive rather than deep. The impressions he had received were preserved in their primitive strength, and in their original words, and his good sense and sound judgment enabled him to apply them with the best effect. To a considerable knowledge of natural philosophy, he added a competent acquaintance with ancient and modern literature, of which his excellent memory enabled him to make the best use. Dr. Paris had a great command of language, and his choice of words was singularly happy. His writings are characterized by an elegance peculiarly his own. Their diffuseness, depending as it does on the number and variety of his illustrations, and the frequency and beauty of his metaphors, adds to, rather than detracts from the pleasure of their perusal.

His general attainments, conversational powers, quickness of repartee, and fund of anecdote, which he told with the happiest effect, rendered him an acquisition to any society. Under a plain exterior he possessed many of the best qualities of our nature. To a manly straightforwardness of purpose and of action, and an intense abhorrence of dissimulation or pretence, were added considerable self-possession and marked decision of character. He was slow, but sincere and firm in his friendships. Those admitted to his intimacy can testify to the kindness of his disposition and the warmth of his heart.

He has been represented as an accomplished classical scholar. We can find no ground for the assertion that he was distinguished at Cambridge for classical attainments; and those who knew him best are aware that he made no pretensions to excellence in that department of literature. He possessed that amount of classical knowledge which marks the educated English gentleman, but he could lay no claim to the character of a finished or critical scholar. His *Harveian* oration was characterized rather by the beauty of its ideas, than by the elegance of the language in which they were conveyed.

Dr. Paris's knowledge of chemistry was extensive and profound. To this fascinating science he had early devoted himself; and he attracted notice on first settling in London, by the extent and precision of his chemical attainments. These brought him into communication with Wollaston, Davy and

others, at a period when chemistry was undergoing one of the most important revolutions which its history presents, and was assuming its rank among the most exact and demonstrative of the inductive sciences. The association with these distinguished philosophers maintained his interest in that science. Notwithstanding the distractions of an increasing practice, he still devoted much of his time to chemistry, and, until within a short period of his death, kept himself on a level with the rapid advances it was making. Although his name is not associated with any great discovery, the respect in which he was held and the deference paid to his opinions by the first chemical philosophers of his age suffice to attest the profundity of his attainments.

As a practical Physician Dr. Paris was deservedly esteemed. In the sick room he was cautious and thoughtful, impassive and imperturbable. His Medical knowledge had been matured with care, and with discriminating sagacity he applied his collected stores with equal accuracy and readiness. His retentive memory and unruffled observation enabled him to meet every exigence by resources well adapted to regulate the operations of nature in circumstances the most alarming. His examination of a patient was peculiar, and to the rising generation of Physicians might appear superficial and insufficient. A few general questions led him to the seat of disease, and this once established, three or four more sufficed for all the purposes of diagnosis and of treatment. In the last-named, the all-important part of the Physician's office, Dr. Paris was probably unrivalled. Few have possessed a more accurate knowledge of remedial agents; none of his contemporaries employed them with greater accuracy, confidence, or success. Fully sensible of the value of properly directed combination, his prescriptions were at once elegant and efficient. Notwithstanding, it may rather be in virtue of his knowledge, he was no lavish prescriber of drugs. He knew when these were no longer necessary, when diet or regimen, or Nature alone, was sufficient for the contest. He dwelt much on general principles, and was loth to act without a precise indication. In the last case in which the writer met him,—a case of much anxiety, and during many days of imminent danger,—he studiously avoided all medicines, and, after dwelling on the absence of a definite indication, concluded the consultation with the aphorism of Boerhaave:—

"Abstine si methodum nescis."

The result proved the wisdom of his advice.

Dr. Paris's writings were numerous and important.

The "*Pharmacologia*," the work on which his professional reputation was founded, and upon which it will mainly rest with posterity, appeared as a small duodecimo volume in 1812. A second edition, somewhat enlarged, appeared shortly afterwards; but it was not until 1820, when the third edition was issued, that the work presented those claims to public notice and approbation by which it was afterwards distinguished. To this edition Dr. Paris prefixed the substance of the lectures he had delivered from the chair of *Materia Medica* at the College of Physicians in 1819. This consisted of two parts. The first, or historical introduction, comprises a philosophical and searching disquisition into the different moral and physical causes which have operated in swaying the opinions of the Practitioner, and in producing the revolutions which have taken place in the belief of mankind with regard to the power and efficacy of different remedial agents. The second part, "*On the Theory and Art of Medicinal Combination*," though founded on Gaubius's work, "*De Methodo Concinnandi Formulas Medicamentorum*," contained much new and very important information, and had the effect of directing the attention of the Profession to a subject of considerable importance, which had been generally neglected in this country. This edition met with a rapid sale, and was exhausted in three months. Repeated and large impressions were henceforward demanded. The fourth appeared in the same year (1820) as its immediate predecessor; the fifth in 1822; the sixth in 1825; the seventh in 1829; the eighth in 1833. Several of these consisted, we believe, of two thousand five hundred copies. The ninth edition, which bears the date of 1843, was the last Professional work of Dr. Paris's pen. This was entirely rewritten, in order to incorporate the latest discoveries in Physiology, Chemistry, and *Materia Medica*; and in some points of view may be regarded as a new work. It no longer comprised, as did the previous editions, a treatise on special Pharmacology, or a history of the individual articles which

constitute the *Materia Medica*, but was devoted to an extended inquiry into the *modus operandi* of medicines, and a fuller exposition of that province which the author had made, and with justifiable complacency claimed, as peculiarly his own, namely, the philosophy of medicinal combination, from which alone can be deduced the theory and art of prescribing. The "*Pharmacologia*" was no less successful in a mercantile, than in a literary point of view; and while it established its author's reputation, it added considerably to his pecuniary emoluments. We know, on the best authority, that Dr. Paris cleared by it more than five thousand guineas.

In 1823 he published (in conjunction with Mr. Fonblanque), a treatise on "*Medical Jurisprudence*," in three volumes, 8vo.; and in 1825, "*The Elements of Medical Chemistry*." The former was a valuable contribution to a subject then beginning to attract the attention of the Profession, and within a short period to become a recognised branch of study by the Medical student. In many respects this was superior to any existing work upon the subject, and in some it still remains unrivalled. It is written, says a contemporary reviewer, in a more classical and attractive style than most Medical works; it embraces the subject throughout its remotest branches; it is interspersed with objects of curiosity, to catch the attention of the general reader, while it handles ably and minutely the more essential topics of pure science. It abounds in allusions to interesting cases decided in the English Courts, and upon the whole, perhaps, no work yet exists in which the precision of Medical inquiries at law is more forcibly instilled by precept, or more beautifully illustrated by example.

"*The Elements of Medical Chemistry*" was intended for the exclusive use of the medical student. It made no pretensions to the character of a complete manual of the science. Its author purposely excluded whatever appeared to have no direct application to the profession, and he states that it had been his sole object to collect all the facts of professional interest, to conduct the student to a knowledge of their principles by the shortest path, and to remove from his road every adventitious object that might obstruct his progress or unprofitably divert his attention. The design was felicitous, its execution able. The work was on a level with the most recent discoveries in chemistry, and many of its facts are placed in original and striking relations. The volume, strange to say, failed to attract attention, never became popular, and after lingering long on hand, the remaining copies were disposed of by the publisher.

The "*Treatise on Diet*, with a view to establish, on practical grounds, a System of Rules for the Prevention and Cure of the Diseases incident to a Disordered State of the Digestive Organs," appeared in 1827. It had an extensive sale, passed through several editions, and was only less successful than the *Pharmacologia*. The fifth and last edition, enlarged and almost re-written, was issued in 1837. This, like all his other works, is characterised by strong good sense, and is written in a style to please the most fastidious reader. The author studiously avoids unnecessary refinement in his distinctions, and keeps steadily in view the object he has before him—the simplification of a difficult subject and the correction of errors, which, though sanctioned by names eminent in the profession, are founded on an incorrect or imperfect view of the laws which govern the animal frame. The most valuable and original portion of the work is that on *Dietetic Observances*,—on the periods for, and intervals between meals—the quantity and quality of food at each, and the conduct to be observed prior and subsequent thereto. These, with an able essay on *Dietetics*, in the *Cyclopædia of Practical Medicine*, comprise the whole of Dr. Paris's medical writings.

The *Life of Sir Humphry Davy*, Bart., London, 1831, at once established Dr. Paris's reputation in a department of literature unconnected with those in which he had already been distinguished. In this work, to quote the words of an eloquent writer, "Dr. Paris has ably discharged the duties of a biographer, and with a powerful eloquence, and lofty enthusiasm, has raised an imperishable monument to the memory of his friend." The life of Davy will remain one of the classical biographies of the English language, and is, undoubtedly, one of the most perfect we possess of any scientific man. For this work Dr. Paris received one thousand guineas.

The qualities of Dr. Paris's mind were peculiarly adapted to biography, for which, with a consciousness of his powers, he had ever shown a predilection. We have already men-

tioned his elegant sketch of the life and scientific labours of the Rev. William Gregor, and have now to add, as the product of his pen, a *Biographical Memoir of W. G. Maton, M.D.*, and a *Biographical Memoir of Arthur Young, Esq.*, Secretary to the Board of Agriculture. The former, read at one of the evening meetings of the Royal College of Physicians, was printed in quarto, for private circulation only; the latter was published in Volume ix. of the *Quarterly Journal of Science, Literature, and the Arts*.

His delightful little book, "*Philosophy in Sport made Science in Earnest*," is too well known to require more than a passing notice. It appeared anonymously, in 1827, but its author's name soon transpired, and became generally known. It attained an enormous popularity, and has passed through numerous large editions. The work is now out of print, but a new edition is on the eve of publication. Its last sheets were corrected by its lamented author within a few days of his death, we believe in the midst of suffering, and after he was confined to the bed from which he rose no more.

His bust, by Jackson, is at Falmouth, in the Hall of the Royal Cornwall Polytechnic Society. His portrait by Skokowe, engraved by Bellin, has since Dr. Paris's death been presented by his family to the College of Physicians. A portrait, representing him in his robes, as President of the College, has been painted by Pickersgill, and is now in that artist's studio.

W. M.

MEDICAL NEWS.

DEATHS.

BLANCH.—Dec. 26, 1856, of disease of the brain, brought on by intense anxiety, aged 48, Gustavus Wm. Blanch, Esq., Surgeon, of Merrick-square, Southwark, leaving a widow and nine children. L.R.C.S. Edin., 1831.

EVANS.—Jan. 17, at Holland-street, Clapham-road, James John Evans, Esq., for many years Surgeon in the Government Emigration Service, aged 41.

GRAY.—Nov. 1, 1856, deeply regretted, of typhus fever, Joseph Bowers Gray, A.M., M.D., Principal of Berwick College, Maine, U.S., aged 39, formerly of Chelmsford, Essex. M.R.C.S.E. 1840.

HOSKEN.—Nov. 30, 1856, at Nusseerabad, R. Hosken, Esq., Surgeon, 2nd Battalion Light Cavalry, H.E.I.C.S. M.R.C.S.E., 1833.

M'CLELLAND.—Jan. 12, aged 45 years, Joseph M'Clelland, M.D., of Manchester.

WILLIAMS.—Jan. 11, at Promenade-terrace, Cheltenham, aged 70, Thomas Williams, Esq., late of the Madras Medical Establishment, H.E.I.C.'s Service.

APPOINTMENTS.

MR. HOLTHOUSE was appointed Surgeon, and Mr. Power, Assistant-Surgeon, to the Westminster Hospital, last Saturday.

MR. NAIRNE, Physician to St. George's Hospital, has been appointed Physician to the Economic Assurance Office, in the place of the late Dr. Paris.

TESTIMONIAL

TO DR. T. SMITH ROWE, OF THE ROYAL SEA-BATHING INFIRMARY, MARGATE.—A valuable gold watch, with appropriate inscription, has been presented to Dr. Rowe, by the Directors of the Royal Sea-Bathing Infirmary, Margate, on the occasion of his resigning office as Resident Surgeon to the Charity. The Testimonial was accompanied by a copy of the minutes of a general meeting of the Board, expressive of regret that the Institution should lose the services of so valuable an officer.

ST. MARY'S HOSPITAL AND DISPENSARY, MANCHESTER.—The annual meeting of the subscribers was held on Wednesday. The minutes of the previous meetings were confirmed, and votes of thanks were passed to the officers, and to Mr. Winterbottom, one of the Medical staff, for a course of lectures to the midwives of the institution; other formal resolutions were adopted. With the single exception of the Royal Infirmary, this is the oldest charitable institution in this city and

neighbourhood. In 1851, the visit of Her Majesty the Queen to Manchester and Salford suggested the idea of founding the present handsome and commodious building in commemoration of that auspicious event. But in 1852 wards were opened for the admission of women and children, before the completion of the present noble and suitable structure. The executive are anxious that this hospital, which possesses such great advantages, should contribute its share to Medical education, and add, as far as possible, to the advancement of obstetric science. With that view they desire, and have determined, to offer every facility which will enable the Medical staff to accomplish this most desirable object; and for this purpose they have made arrangements to have lectures delivered to Medical students on the principles and practice of obstetric medicine, and also clinical lectures on the particular cases in the hospital.

SAMARITAN FREE HOSPITAL FOR WOMEN.—Two Sermons were preached on Sunday last on behalf of this Charity, at Quebec Chapel, by the Rev. H. Alford and the Rev. C. T. Woods, the Honorary Chaplain and Honorary Secretary of the Institution. The sum of £98 7s. 6d. was collected.

THE LIVERPOOL INFIRMARY.—The annual meeting of the Liverpool Royal Infirmary was held on Monday; Mr. T. B. Horsfall, M.P., in the chair. From the treasurer's account it appeared that there was a balance of £936 17s. 10d. against the institution. There had been a weekly average of 166 patients in the building for the past year; 351 out-door patients, and 638 surgical casualties. In the Lunatic Asylum the weekly average had been 61, and in the Lock Hospital 45 patients. The Earl of Derby was unanimously elected president of the institution for the present year.

PRIZES PROPOSED BY THE ACADEMIE ROYALE DE MÉDECINE BELGIQUE.—1. A prize of 1000 francs: "Examine, and as far as possible illustrate by new experiments, the conclusions derivable from anatomy and physiology relative to the influence which the nervous system exerts on nutrition (the plastic acts)." 2. A prize of 600 francs: "Exhibit and give an appreciation of the course and progress of Surgery from the commencement of the present century until the present time." 3. A prize of 600 francs: "Describe methods which are certain and of easy execution for determining the true value of opiums and yellow cinchonas, with respect to their pharmaceutical employment." Essays in reply to these questions to be forwarded to the Secretary of the Academy, Brussels, by the 15th of March, 1858. 4. A gold medal of 600 francs: "Describe the causes, symptoms, character, and treatment, of the diseases to which the coal-miners of Belgium are liable." 5. A gold medal of 500 francs: "Give an account of the exact state of science with regard to the diseases of the nervous system in the horse, especially dwelling upon the differential diagnosis of these affections." Replies to these two questions to be forwarded by the 1st of August, 1857.

THE CHARGE OF FORGERY AGAINST A HOMŒOPATHIC PHYSICIAN.—The High Court of Justiciary at Edinburgh has been engaged in trying an indictment for forgery prepared against Dr. Dionysius Wielobycki, an homœopathic physician, —the circumstances of which had been previously published. It will be remembered that the charge was that of forging, and uttering, knowing it to be forged, the will of Miss Margaret Darling, of Portobello. A verdict of guilty was found against the prisoner, the jury recommending him to mercy on the ground of previous good character. He has since been sentenced to 14 years' transportation.

MEDICINE IN CANADA.—Dr. Mewburn, of Stamford, county Welland, Canada West, "who has always looked forward with pleasure to receive the *Medical Times and Gazette* from nearly its commencement," writes further as follows:—"People in this province and the United States swallow enormous quantities of quack medicines, and there are some Medical men who are no orious for making doctors' shops of their patients' bellies! The usual practice is, to charge for visits, in towns and villages, one dollar each, medicines generally included. When county mileage is added, such is allowed in courts of law. What a pity such a plan cannot be followed out at home!"

PUERPERAL FEVER.—In his report on the sanitary condition of St. Pancras during December, Dr. Hillier remarks as follows on two cases of puerperal fever in the workhouse:—"There have been two deaths from puerperal fever, and several persons are now suffering from it. This disease is of

a most infectious character, and when once it has gained access to a lying-in ward, it clings to it with remarkable tenacity for some time, in spite of all disinfectants. As soon as the disease made its appearance, Mr. Coster, the Senior Surgeon, with the utmost promptitude, used all precautionary measures to prevent its extension: such as the complete isolation of the patients suffering from it; preventing the nurses who attend on them from coming near other parturient women; the entire change of linen and beds; and placing all persons, about to be confined, in a distant part of the building. The disease, however, is not yet eradicated. It is the intention of the Directors not to allow any nurse, who has been near the patients with puerperal fever, to attend lying-in women for three weeks. The resident surgeons will not attend any other accouchements for the same period; and all fresh cases of labour will, if possible, be kept at their own houses, or sent to lying-in hospitals. This disease frequently co-exists with erysipelas, and it will be remembered that, in my last report, I stated that this disease was prevalent in the House, as it is also at the present time." It would be well if such precautions were adopted more frequently.

METEOROLOGICAL SOCIETY OF SCOTLAND.—The annual meeting of this Society was held on Wednesday, the Marquis of Tweeddale, Vice-President of the Society, in the Chair. The Report stated that the Council had been engaged since the general meeting in July in establishing stations throughout Scotland for meteorological observations, comparing and deciding upon the instruments to be employed, and making other preliminary arrangements. Forty-eight meteorological stations had already been established in Scotland, with which the Secretary was in communication; and in a few years he hoped that accurate and trustworthy results from these sources, regarding the climate and meteorological phenomena of the different districts, would be placed before the Society and the public. The number of members was already 293, and the financial state of the Society was satisfactory and promising. Dr. Stark, Secretary of the Society, read a very interesting address on the "Objects and Advantages of Meteorology."

CHLOROFORM IN SEA-SICKNESS.—Dr. Landerer, a Medical man at Athens, announces that he has discovered a specific against sea-sickness, viz., to give from ten to twelve drops of chloroform in water. He says the chloroform in most cases removes nausea, and persons who have taken the remedy soon become able to stand up and get accustomed to the movement of the vessel. Should the sickness return, a fresh dose is to be taken. It was tried on twenty passengers on a very rough voyage from Zea to Athens, and all, with the exception of two, were cured by one dose. The minority, two ladies, were able to resist the feeling of illness on taking a second dose.

MORTALITY NOTABILIA.—The total number of deaths registered in London were 1171. Of these 582 were deaths of males, 589 those of females. In the corresponding week the number was 1219, but for the purpose of comparison this should be raised proportionally to increase of population up to the present time, in which case it will become 1341. The result of the comparison is that the deaths of last week were less by 170 than the average rate of mortality would have produced.

BIRTHS.—The births of 966 boys and 818 girls, 1784 children, were registered in London.

METEOROLOGY.—At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29.636 in. On Sunday (the 11th) the reading fell to 28.85 in., and on Saturday rose to 30.21 in.

THE following are the number of Deaths from Small-pox, Measles, Scarlatina, Hooping-cough, Diarrhœa, and Typhus, in the several Districts of London, for the past Week:—

	Popula- tion.	Small- pox.	Measles.	Scar- latina	Hoop- ing- Cough.	Dia- rrhœa.	Ty- phus.
West.....	376,427	..	5	8	9	2	5
North	490,396	2	10	3	10	5	5
Central ..	393,256	1	6	11	12	2	5
East.....	485,522	2	8	10	9	4	15
South	616,635	1	4	5	15	2	4
Total..	2,362,236	6	33	37	55	15	34

DEATHS REGISTERED in the Metropolis for the Week ending Saturday, January 17, 1857.

CAUSES OF DEATH.	In the Week ending Saturday, Jan. 17, 1857.						Averages of Temperature and Deaths in 10 Weeks.
	Deaths of Persons.						
	AT ALL AGES.	Under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.	At 80 Years of Age and Upwards.	
Mean Temperature	36°5						38°8
ALL CAUSES	1171	523	138	212	231	41	1219.2
SPECIFIED CAUSES	1142	520	138	212	231	41	1207.9
DISEASES:—							
1. Zymotic Class	221	178	14	9	18	2	264.2
2. Dropsy, Cancer, and others of uncertain seat ..	48	5	2	19	20	2	47.6
3. Tubercular Class	192	58	74	52	8	..	189.5
4. Of Brain, Nerves, etc. ..	108	44	7	16	33	8	134.5
5. Of Heart, etc.	42	7	8	11	16	..	46.4
6. Of Respiratory Organs ..	280	128	14	63	64	11	270.7
7. Of Digestive Organs ..	57	22	4	18	13	..	65.3
8. Of Kidneys, etc.	23	3	4	5	10	1	13.7
9. Of Uterus; viz.—Puer- peral Disease, etc. ..	12	1	4	6	1	..	9.7
10. Of Joints, Bones; viz.— Rheumatism, etc.	4	..	..	2	2	..	6.8
11. Of Skin, etc.	1	..	..	..	1	..	2.5
12. Malformations	1	1	..	..	..	..	3.5
13. Debility from Premature Birth, etc.	25	25	..	..	..	..	32.9
14. Atrophy	39	28	..	3	8	..	27.1
15. Age	48	..	..	..	31	17	65.0
16. Sudden	8	5	..	2	1	..	6.4
17. Violence, Privation, etc. .	33	15	7	6	5	..	22.1
CAUSES NOT SPECIFIED. .	29	3	..	..	..	..	..

BOOKS RECEIVED.

- Traditions and Superstitions of the New Zealanders. By E. Shortland, M.A. Second Edition. London. 1856.
- Report on the Sanitary Condition of the Belgrave Sub-District. By C. J. B. Aldis, M.A., F.R.C.P.
- On Purgatives on the Horse. By J. Field, M.R.C.V.S. London. 1856.
- The Asylum Journal. January. 1857.
- Epidemic Cholera, Diarrhoea, and Dysentery. By H. Jeanueret, M.D. London. 1857.
- A Descriptive Catalogue of Preparations illustrative of the Diseases of the Ear, in the Museum of Joseph Toynbee, F.R.S. London. 1857.
- ent Lunatic Asylum. Annual Report. 1855-6.
- Bermuda. By A Field Officer. London. 1857.
- The Journal of Public Health. January. 1857.
- The Colonial Life Assurance Almanack. 1857.
- On certain Painful Muscular Affections. By T. Inman, M.D. Liverpool. 1856.
- Adulterations Detected. By A. H. Hassall, M.D. London. 1857.
- The Treatment of Iritis without Mercury. By H. W. Williams, M.D. Boston. 1856.
- The Queen's University in Ireland and the Queen's Colleges. By Sir R. Kane, F.R.S. Dublin. 1856.

TO CORRESPONDENTS.

X. Y. Z.—By the recent regulations of some of the examining bodies, no lecturer is recognised as a teacher of Medical science, unless he is attached to a recognised Medical School. The gentleman alluded to was recognised as a lecturer before the new regulations came into force.

Mr. John Baker.—The orchidaceous tribe of plants yields very few products of any importance in the arts. The only substances known to be obtained from this order are vanilla, which is a flavouring material, and salep, which is a kind of starchy substance. Both are obtained from species of Orchidaceae, the former from *Vanilla aromatica*, the latter from *Orchis mascula*.

co-pathologus.—If *hyperuosis*, from *ὑπερ*, super, *αἷς*, *αἷος*, fibrina, indicates an excess of fibrin in the blood; and the word *hypuosis*, from *ὑπο*, sub, and *αἷς*, *αἷος*, implies the opposite condition.

An Undergraduate.—The Medical graduates of the University of London now possess the same privileges, in respect to practice, with those enjoyed by the Doctors of Medicine of Oxford and Cambridge. They are legally entitled to practise throughout England and Wales, except in London; and within seven miles of the centre of the metropolis.

STRYCHNIA POISONING.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I was surprised much at the remarks of the Coroner at the inquest on the death of the servant girl from strychnine, and consider the presence or absence of the contracted state of the muscles after death to depend entirely upon the dose or quantity taken. In the cases of Palmer and Dove small doses were given, whereas in the case of this servant girl a very large dose was taken, and consequently almost instant death. This I have proved five times in a cat: when it has taken from two to three grains, it has died instantly, and no convulsions. In one instance the cat was going up stairs, and fell dead on the second stair after taking it.

R. C. B.

Bluebottle.—Not in any British University; and, we believe, not in any European University, without examination.

We have received another communication in answer to a *Subscriber* who wished to put out an illegitimate child, which we will forward to him if he will send his address.

If W. A. P. will send his address, he shall receive a full reply by a private note.

Mr. Howe will not be affected by the new Bill.

Mr. Way's notice arrived too late for insertion last week. All notices of expected operations should be at the office before 1 o'clock on Thursday.

A Humble Enquirer.—No, to both questions.

D. E.—The note is too indefinite to be useful.

Mr. Clough's case shall be inserted.

A Medical Student.—Certainly, it passes by one of the ureters.

A Provincial Practitioner.—The paragraph has, most likely, been inserted by some injudicious friend.

COMMUNICATIONS have been received from—

Dr. ROBERT LEE; Mr. TOYNBEE; Mr. WHARTON JONES; Mr. HOLMES COOTE; AN ORIGINAL SUBSCRIBER; Dr. WADE; Mr. FRODSHAM; Mr. DERMOT; Mr. HOLMES; Dr. VINER; Dr. CAMPS; Dr. SHEARMAN; Dr. BROWNE; Mr. GRIFFIN; Mr. BARLOW; Mr. HUGHES; Dr. RAMSKILL; Dr. AMOTT; Dr. GORDON; Mr. WALLIS; Mr. MACKENZIE; Mr. H. GUY; Dr. THOMSON; Mr. WAY; Mr. T. R. JONES; Mr. HAZEL; Dr. DAVIS; Dr. TOO-GOOD; Mr. HAVILAND; Dr. RICE; Mr. ROWLAND; Dr. HILLIER; Dr. MERAN; Mr. STATTER; Mr. RUTLEDGE; Dr. ROWE; Mr. BIDDLE; Mr. BRICKWELL; Mr. J. JONES; Mr. COOKE; Mr. J. NORTH; Dr. ASHTON; Mr. GREENWOOD; Mr. G. TOWNS; Mr. P. DOWNEY; Mr. MARSHALL; Mr. G. HILLS; Mr. W. ANDERSON; Mr. BARTLET; Mr. DREDGE; Dr. SKINNER; Mr. TOWNS; Mr. E. WADAMS; Mr. J. TIDBOULD; Mr. W. MERCER; Mr. R. GRIFFIN; Mr. EARNSHAW; Mr. VEASEY; Mr. J. RAMSKILL; Mr. RICHARDSON; Mr. SHILLETO; Mr. W. ADAMS; Mr. J. F. WEST, Birmingham; Mr. WHITE, Nottingham; Mr. H. JONES; E. A. WILKINSON; Dr. O'NEILL; Dr. SANKEY; Mr. SANGER; Mr. E. DAVIES; Mr. D. THOMAS; Mr. BECKETT; Mr. RAYNES; Mr. TURNBULL; Mr. J. FRAME; Dr. ABSOLON; Mr. T. STOKES; Mr. J. RYAN; Mr. POTTER; Mr. BULLOCK; Mr. T. DAVIS; Mr. THOMPSON; Mr. ARMSTRONG; Mr. T. RADFORD.

APPOINTMENTS FOR THE WEEK.

JANUARY 24. Saturday (this day).

- Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; Westminster, 1 p.m.; King's, 2 p.m.; Charing Cross, 1 p.m.
- MEDICAL SOCIETY OF LONDON, 8 p.m.: Dr. Ogier Ward "On the Medicinal Effects of Ammonia, and its Preparations." Election of Committee for selection of Officers and Council, 8 to 8½ p.m.
- ROYAL INSTITUTION, 3 p.m., Professor Phillips "On the Nature and Origin of the Rocky Crust of the Globe."
- ROYAL BOTANIC SOCIETY, 3¼ p.m.

26. Monday.

- Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.; Orthopaedic Hospital, 3 p.m.
- ENTOMOLOGICAL SOCIETY, 8 p.m. Anniversary.

27. Tuesday.

- Operations at Guy's, 1 p.m.
- ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m., Mr. Brodhurst "On Displacement of the Scapula upwards, through paralysis of the Serratus Magnus Muscle, and consequent retraction of the Rhomboidei, Levator Anguli Scapulae, and Propezius Muscles;" Dr. Fuller: "Five Cases of Tracheotomy in Croup, with remarks on certain points connected with the Operation."
- ROYAL INSTITUTION, 3 p.m.: Professor Huxley "On the Senses of Smell and Taste."
- ZOOLOGICAL SOCIETY, 9 p.m.
- METEOROLOGICAL SOCIETY, 7 p.m.

28. Wednesday.

- Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m. Orthopaedic Hospital, 3 p.m.
- HUNTERIAN SOCIETY, 8 p.m.: Mr. Wordsworth "On Ectropion treated by a New Operation."

29. Thursday.

- Operations at St. George's, 1 p.m.; Middlesex, 12½ p.m.; Central London Ophthalmic, 1 p.m.; Loidon, 1½ p.m.
- ROYAL SOCIETY, 8½ p.m.
- ROYAL INSTITUTION, 3 p.m.: Professor Tyndall "On Sound."

30. Friday.

- Operations at the Moorfields Ophthalmic, 10 a.m.; Westminster Ophthalmic, 1½ p.m.
- ROYAL INSTITUTION, 8½ p.m., Rev. Frederick D. Maurice, "On Milton considered as a Schoolmaster."

ORIGINAL LECTURES.

A COURSE OF LECTURES

ON THE

NATURE AND TREATMENT
OF THE DISEASES OF THE EAR.

DELIVERED AT

St. Mary's Hospital Medical School.

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LECTURE X.

MEMBRANA TYMPANI.

Anatomical Observations.—There are so many points of interest and novelty in reference to the structure of the membrana tympani, that I shall not scruple to enter fully upon the subject. The membrana tympani, examined from without inwards, may be described as consisting of the following layers:—

1. The epidermis.
2. The dermis.
3. The fibrous layer, composed of
 - a. The lamina of radiating fibres.
 - b. The lamina of circular fibres.
4. The mucous membrane.

I will examine these laminæ *seriatim*.

The Epidermis is a thin layer covering the outer surface of the dermoid lamina; it is continuous with the epidermis of the external meatus, and when subjected to the process of maceration it can be removed in the form of a small blind pouch, which presents, as it were, a cast of the meatus and of the external surface of the membrana tympani. When floating in water the pouch assumes the form it had when in contact with other tissues, and its internal extremity is convex, corresponding with the external concavity of the membrana tympani. The layer of epidermis forming the outer coat of the membrana tympani is thin, and in the living subject so transparent that the dermoid layer is distinctly seen through its substance; its outer surface is very smooth, and capable of reflecting light; this layer presents no appearance of an orifice.

In the course of dissection I have more than once found this delicate epidermis to be the only layer remaining over portions varying from a line to a line and a half in breadth, and yet it appeared to have been sufficient to close the tympanic cavity, so as to render the power of hearing nearly perfect. The knowledge of the fact that this delicate layer is occasionally all that is left in parts of the membrana tympani, ought to induce caution in the use of the syringe when no cerumen is present, as its application may cause a rupture of the epidermis.

The Dermoid layer, as its name implies, is continuous with the dermis lining the external meatus, and it is situated between the epidermis and the radiate fibrous layer. It is extremely thin, and it secretes the epidermis. Previous to the publication of a paper by myself on the structure of the membrana tympani in the "Philosophical Transactions" for 1851, it was supposed that the epidermis was secreted by the radiate fibrous layer. The presence of this membrane is best demonstrated by carefully dissecting under water the membranous meatus from the upper surface of the osseous tube as far as the attachment of the membrana tympani; at this point the periosteum of the meatus is seen to become continuous with the radiate fibrous lamina; this being cut through, the dermoid layer is seen passing down over the outer surface of the radiate fibres, and separating them from the epidermis. If the upper portion of this layer be drawn gently downwards by one hand, by means of a fine needle in the other, the delicate cellular tissue connecting it to the fibrous lamina can be broken up, and it may be removed entire. The presence of the dermoid lamina may also be shown by the introduction of a fine bristle between it and the radiating fibrous layer, at the superior part of the membrana tympani, and then by passing it down the cellular tissue is lacerated.

In a healthy state, when uninjected by blood or by artificial means, the dermoid lamina is thin and transparent; examined by the microscope its structure is found to resemble areolar tissue. When injected, this membrane is observed to have numerous blood-vessels ramifying through it, and they form an elaborate plexus; when these vessels are enlarged, they give the red appearance to the surface of the membrana tympani which is so frequently met with during life. It is upon the supply of nerves to this membrane that the exquisite sensibility of the membrana tympani depends.

A knowledge of the existence of the membrane here described is of interest to the anatomist, who recognises in it the secreting organ of the epidermoid layer of the membrana tympani; and to the Surgeon, who by its presence is able to understand phenomena occurring in certain diseases of the ear which have been hitherto incomprehensible to him. In certain diseased states the dermoid layer of the membrana tympani becomes much hypertrophied.

The proper *Fibrous layer* of the membrana tympani can be easily separated into two laminæ, which are named from the direction of their component fibres. Previous to entering upon an examination of these structures, it is desirable to cite the opinions which eminent anatomists have entertained on the subject.

In the Croonian Lecture, published in the nineteenth volume of the "Philosophical Transactions," Sir Everard Home advanced the opinion that the membrana tympani in the human subject was muscular. His words are, "When viewed in a microscope magnified twenty-three times, the muscular fibres are beautifully conspicuous, and appear uniformly the same throughout the whole surface. There being no central tendon as in the diaphragm, the muscular fibres appear only to form the internal layer of the membrane, and are most distinctly seen when viewed on that side." (a) The use of this radiated muscle, Sir Everard Home states, is "to give those different degrees of tension to the membrane, which empower it to correspond with the variety of external tremors." (b) Since the first publication of this opinion as to the muscularity of the membrana tympani, anatomists have generally conceded that it is fibrous, but they have widely differed as to its composition. According to Mr. Quain and Dr. Sharpey, "it is made up of fine closely arranged fibres, the greater number of which radiate from near the centre to the circumference; but within these are circular fibres which are more scattered and indistinct, except close to the margin of the membrane, where they form a dense, almost cartilaginous ring." (c) Mr. Wharton Jones writes, "The proper membrane can be divided into two layers, an outer thin one, consisting of radiating fibres, and an inner thicker layer, which is less distinctly fibrous, though when torn it does indicate a fibrous disposition, and that in a direction opposite to the former. . . . The fibres which cross the radiating ones are also more aggregated at the centre. They run parallel with the handle of the malleus, and turn round its extremity. At the circumference of the proper membrane there is a thick, firm, ligamentous or cartilaginous ring, which is fixed in the groove of the bone. The ligamentous ring appears to be formed by an aggregation of the circular fibres interwoven with the peripheral extremities of the radiating ones." (d)

By careful dissection the fibrous layers of the membrana tympani may be separated into two distinct laminæ, the fibres of which have no communication with each other. The external layer may be called the *radiate fibrous lamina*, on account of its fibres radiating from the malleus to be attached to the cartilaginous ring, and the internal the *circular fibrous lamina*. The radiate layer is the thicker and stronger. So readily may the two layers be separated from each other, that they are detached with greater facility than that with which the circular layer can be removed from the mucous membrane.

a. *The Radiate Fibrous Lamina.*—If the whole of the membrana tympani be carefully removed, there will be observed at its circumference a white dense ring, apparently cartilaginous, which is received into the osseous groove of the temporal bone appropriated to it. It will be remembered, however, that this groove occupies only about five-sixths of the circumference of

(a) *Loc. cit.*, p. 5.

(b) P. 11.

(c) *Elements of Anatomy*, fifth edition, 1848, vol. ii. p. 932.(d) *Cyclopædia of Anatomy and Physiology*, vol. ii. p. 545.

the inner extremity of the meatus, the upper sixth being smooth instead of grooved. The cartilaginous ring at the upper part is attached to the malleus, the anterior extremity being inserted into the anterior part of the cervix of this bone, and the posterior extremity into its posterior part; the outer surface of this ring has attached to it the periosteum, lining the external meatus. If the radiate lamina be examined with a magnifying power of ten or twelve diameters, fibres will be observed whose peripheries are attached to the cartilaginous ring, and their other extremities to the malleus. The uppermost of these fibres, however, must be excepted from the observation just made, for instead of passing from the superior part of the cartilaginous ring to the malleus, they take their course in front of the processus brevis, and form a distinct layer of membrane covering its outer surface. The disposition of this portion of the radiating fibrous lamina is interesting alike to the anatomist and to the surgeon, for it is observed to be continuous with the periosteal lining of the upper part of the external meatus. Mr. Shrapnell, perceiving that this portion of the membrana tympani was not so tense as the rest, considered it to be a distinct structure, and named it the "membrana flaccida."

Directly below the processus brevis of the malleus the radiating fibres are attached to the ridge occupying the external surface of the bone, but at this part the fibres from each half of the membrana tympani are inserted so near to each other that no portion of the malleus is visible when viewed exteriorly; towards the inferior extremity of the long process, however, the fibres are attached to the sides and not to the anterior surface, and thus a small portion of the external surface of the long process at its inferior part is left bare and is in contact with the dermoid layer, as may be distinctly seen in the healthy living ear by means of the speculum auris and a magnifying lens. The fibres extending from the malleus and forming the posterior segment of the membrane, are one-fourth longer than those forming the anterior segment. The thickest part of this layer is that which surrounds the extremity of the long process of the malleus, and the most attenuated is that which lies between the posterior margin of the long process of the malleus and the circumference of the membrana tympani.

Structure of the Radiate Lamina.—The fibres composing the radiate lamina, when examined in a fresh state by the microscope, are translucent, and, with the exception of a few transparent granules, present no peculiarity of structure; the longitudinal parallel wavy lines, characteristic of ordinary fibrous membranes, are absent. These fibres are flat, and vary from a 4000th to a 5000th part of an inch in breadth. In passing from the circular cartilage to the malleus these fibres interlace with each other, from whence originates the peculiar diamond-shaped markings observable on the outer surface of the membrane. When treated with acetic acid this lamina becomes opaque, and sometimes elongated oval nuclei are observed, the long axes of which correspond with the course of the fibres. These nuclei are by no means invariably to be detected, and in several specimens they were not apparent on the application of the acid. In no instance was an oval nucleus visible in an isolated fibre.

The *circular white band* at the circumference of the radiate fibres consists of a firm mass of tissue, which is slightly elastic. It presents an indistinct appearance of fibres intermixed with oval-shaped nuclei. Upon the application of acetic acid, this structure loses its white aspect, becomes translucent, and discloses a greater number of the oval nuclei.

b. *The Circular Fibrous Lamina.*—This membrane is attached to the radiating fibres by fine cellular tissue, and, as previously stated, the two structures can be separated with facility; the fibres of each lamina are quite distinct, and never intermingle. The circular lamina consists, as its name implies, of circular fibres; they are firm and strong at its circumference, but towards the centre they are so attenuated as to be detected only by considerable care. The strong fibres at the circumference of the layer form a complete circle, and are attached to each side of the body of the malleus, and to the sides of the upper third of the processus longus. When carefully examined by a magnifying power of thirty to forty diameters, these circular fibres are observed to be intersected by others of an extremely delicate character; these delicate fibres are more numerous towards the central part of the lamina, where they are so intimately blended with the circular fibres that the latter are not easily distinguished. The central thin portion

of the circular lamina is not attached to the malleus, but the fibres from each side are continuous, and they form a membranous layer, composed of a series of concentric fibrous circles. The outer surface of this central portion of the lamina is in contact with the inner surface of the lower half of the long process of the malleus, to which it is adherent by loose cellular tissue. The circular fibrous lamina is entirely unconnected with the cartilaginous ring, into which the radiating fibres are inserted, but it is continuous with the periosteal lining of the tympanic cavity, of which it may be considered a modification. When the lamina of circular fibres is detached from that of the radiating fibres, it will be found to be slightly concave externally, though not to the same extent as the outer layer. In its separate condition it becomes rather less concave than when it was applied to the inner surface of the radiating fibres, and when its central portion is pressed inwards so as to increase its concavity, its inherent elasticity causes it quickly to resume its former shape, resembling that of a saucer. If the two layers be detached from each other and placed side by side, the greater degree of concavity externally of the radiating fibrous layer is very perceptible.

Structure of the Circular Lamina.—When highly magnified, the fibres composing the circular lamina are found to be smaller than those constituting the radiate fibrous layer; they vary in size from the 6000th to 10,000th of an inch in breadth. The outer fibres run parallel with each other, and do not interlace so much as the radiating fibres; they are diaphanous, and do not present any wavy longitudinal lines. When acetic acid is applied the fibres enlarge and assume a certain degree of opacity, and in some instances this lamina also has presented distinct oval nuclei, elongated in the direction of the fibres. Like the radiate lamina, the separate fibres were never observed to reveal the existence of nuclei, and as a general rule their presence in the tissue is not detected.

It is often not easy to decide whether a structure is muscular, and doubts may arise as to the real nature of the two fibrous laminæ of the membrana tympani. My own researches do not seem to favour the view of that membrane being a contractile tissue.

The facts which seem to militate against the idea of its being muscular are,—

1st. The absence of distinct nuclei in the fibres.

2nd. Their great denseness and hardness, their firm and unyielding structure, they being so strong that it is with some difficulty they can be torn across.

The *mucous membrane* forming the inner layer of the membrana tympani is in the healthy ear so extremely thin that its presence is with difficulty detected; by careful dissection, however, it can nevertheless be removed entire from the inner surface of the circular fibres, to which it is connected with considerable firmness by fine cellular tissue.

It will now be evident that of all the laminæ which constitute the membrana tympani not one is proper to the organ, all of them being directly continuous with other structures, of which they appear to be modifications. Thus:—

1st. The *epidermis* is continuous with that lining the external meatus.

2nd. The *dermis* is continuous with the dermis of the meatus.

3rd. The *radiate fibrous lamina* is a prolongation of the periosteal lining of the external meatus.

4th. The *circular fibrous lamina* is a prolongation of the periosteum of the tympanum.

5th. The layer of *mucous membrane* forms part of the lining of the tympanic cavity.

Previous to considering the functions of the fibrous laminæ of the membrana tympani, it is desirable to advert to another point in the structure and relations of this organ. It has been already stated that the membrana tympani is attached at its circumference to the temporal bone, and at its central part to the malleus. The latter bone is so suspended by means of the processus gracilis and the short process of the incus, that the long process can move inwards towards the tympanic cavity, and outwards towards the meatus. It must be evident, therefore, that in order to prevent the concave membrana tympani, with the above attachments, from remaining in a state of relaxation, either the tensor tympani muscle must be in a state of continual contraction, or some other provision must exist for retaining the membrana tympani in the moderately tense condition fitting it to receive the sonorous undulations. The provision which actually exists, and which, so far as I am

aware, has hitherto escaped the attention of anatomists, is the *tensor ligament of the membrana tympani*.

The ligament in question is about three-fourths of a line in length, and it is attached internally to the cochleariform process, and externally to that part of the inner surface of the malleus where the long process joins the neck. In the interior of this ligament, which presents a tubular shape, is placed the tendon of the tensor tympani muscle. It is thin anteriorly, where it consists of very delicate fibres, but the remainder is thick and dense, being composed of firm ligamentous tissue. So long as this ligament remains entire and the membrana tympani uninjured, the latter structure retains its natural degree of concavity and tenseness; but upon the ligament being cut through, or upon a solution of continuity being effected as the result of disease, the membrana tympani becomes very flaccid, even though the tendon of the tensor tympani muscle remains entire. In a preparation, when the tensor tympani muscle is pulled, the membrana tympani is rendered very tense, and the tensor tympani ligament is relaxed; but immediately that the muscle is relaxed the membrana tympani is observed to return to its usual state, and the ligament is again rendered tense.

On the Functions of the Fibrous Laminae of the Membrana Tympani.—It is obvious that one use of the fibrous laminae of the membrana tympani is to present a firm but delicate membranous septum for the reception of sonorous undulations. The arrangement of the two sets of fibres at right angles to each other has the effect of imparting great strength to the membrane, while it preserves its extreme delicacy and tenuity. It has been stated that there is no evidence to prove that the fibres, of which the membrana tympani is composed, possess in themselves any contractile power; neither do the component fibres of the laminae appear to evince more than an extremely slight degree of elasticity. An examination, however, of the structure after death shows that it has an inherent power of returning to its natural state of tension after being unusually distended. Thus, if the membrana tympani be exposed without interfering with its natural state of tension, and the canal containing the tensor tympani muscle be laid open, so that the muscle can be drawn towards its origin, the external concavity of the membrana tympani can be increased till it becomes very tense, but as soon as the muscle is let go the membrana tympani will be observed to resume its former condition. This action is explainable partly by the slight elasticity of the circular cartilaginous band, into which the peripheral extremities of the radiating fibres are inserted, and partly by the slight elasticity of these fibres themselves, but more especially by the peculiar arrangement of the circular fibrous lamina, which, it will be remembered, has always a tendency, when left to itself, to assume a more shallow form. Thus, when the membrane is rendered very concave, the circular fibres are slightly separated from each other; but when the extra tension ceases, the fibres intersecting the circular ones aid in drawing the latter together again.

The disposition of the central part of the circular lamina also assists it in the function of bringing back the membrana tympani to its natural state after tension by the tensor tympani muscle. It has been stated that the middle part of these circular fibres, instead of being attached to the handle of the malleus, is applied against its inner surface, and thus the membrane is rendered tense by the pressure of the long process of the malleus against its outer surface during the action of the tensor tympani muscle, and when this muscle ceases to act, the central part of the circular layer of fibres reacts on the malleus, and constrains it to resume its usual position. Besides the office of bringing the membrana tympani to its natural state after the action of the tensor tympani muscle, the circular fibrous layer would appear to be always acting as an antagonist to the tensor tympani ligament, and by the continued action of these two tissues, the one drawing it inwards the other outwards, the membrana tympani is kept in a state adapted to receive all the ordinary sonorous undulations, independent of the exercise of any muscular power.

The Functions of the Membrana Tympani.—The opinion usually held by anatomists is, that the use of the membrana tympani is to receive the sonorous undulations from the air of the meatus, and to conduct them to the chain of vesicles by which they are conveyed to the labyrinth. When speaking of the functions of the tympanic cavity I shall endeavour to show that the sonorous undulations are not conveyed to the labyrinth by the chain of bones, but by the air in the tympanic

cavity only. Whether the vibrations are conducted to the labyrinth through both of the media or through the air only, there can be no doubt that the membrana tympani is the agent whereby the vibrations are conveyed from the meatus externus to the tympanum, although I think there can be no doubt, as I shall attempt to prove when speaking of the tympanic cavity, that another function of the membrana tympani is, in conjunction with the muscles and bones of the tympanum, to act as the analogue of the iris in the eye, viz., to shut out from the internal ear, or at least to modify the effect of, very loud vibrations; and secondly, to render the ear susceptible to the most delicate undulation.

Whichever opinion may be correct respecting the functions of the membrana tympani, there can be no doubt that its integrity is essential to the due performance of its functions, and also that it should retain its natural degree of resiliency, and that its muscles should be able to move it with ease.

ORIGINAL COMMUNICATIONS.

ON THE PHYSIOLOGICAL ACTION OF BELLADONNA AND ATROPINE ON THE MOVEMENTS OF THE IRIS.

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THE various preparations of deadly nightshade are well known to be of great practical utility to the ophthalmatologist. In iritis they render him invaluable aid in preventing the approach, or in destroying the adhesions already generated, between the iris and crystalline lens. In the diagnosis of cataract, they are of important service in enabling him to ascertain the full extent of the disease, while in the operation for its extraction their assistance, in the generality of cases, is not sufficiently appreciated in this country. In each of the foregoing examples, the beneficial effect is due to the peculiar property possessed by deadly nightshade of inducing an extraordinary dilatation of the pupil. As the active properties of the plant are concentrated in its characteristic alkaloid, the latter is frequently employed to produce this effect;—and indeed it is now generally preferred, in consequence of its being less liable to excite the objectionable irritation of the eye, which not unfrequently accompanies the employment of belladonna. Atropine possesses still further advantages, inasmuch as its action is less uncertain, and at the same time more rapidly developed.

Dilatation of the pupil can be induced equally well by the internal use of the drug as by its external application; the only difference observable in the two modes of administration being, that when taken internally, the effect upon the iris is accompanied by an impairment of vision, while no such issue follows its local employment. The cause of the narcotic acting differently in these two cases might, perhaps, be accounted for on the supposition that in the one it acted through the blood upon the origins, in the other, upon the periphery of the nerves. Further on we shall find occasion to reconsider this point.

The peculiar power possessed by the preparations of belladonna over the movements of the iris, has been very variously explained. At one time it was imagined, that the dilatation of the pupil following upon the application of belladonna to the eye, depended on paralysis of the optic nerve. This theory was overturned, however, by Dr. Himley, who observed that the pupil dilated and contracted, even when the optic nerve was completely paralysed. Professor Reute says that "belladonna causes dilatation of the pupil by enfeebling the sensory ciliary nerves, and thus increasing the influence of the sympathetic, in the same way as a solution of strychninum purum, when applied to the interior of the heart, induces tetanic spasm in that organ." (a)

Professor Ludwig, in his recently published work on Physiology, inclines to the idea that belladonna may perhaps have the power of directly stimulating the radiating muscle of the iris, and thereby produce dilatation of the pupil. A number

(a) Wagner's Handwörterbuch der Physiologie, Bd. iii., s. 86.

of other views, which our space does not permit us to notice, have been and are still held, with regard to the manner in which the narcotic induces its characteristic action upon the iris; but none has met with a more favourable reception than that which attributes the dilatation of the pupil to its paralyzing the third pair of nerves. This view, I might say, was regarded by British, as well as many continental physiologists, almost in the light of an established doctrine, until Professor Wharton Jones called it in question in 1847. Mr. Benjamin Bell, in an able paper, published in the July number of the *Edinburgh Medical Journal*, supports Professor Jones's view in ascribing the physiological effect of belladonna and atropine upon the pupil, not to their producing paralysis of the third pair of nerves, which are supposed to supply the circular fibres, but to the excitation of the filaments of the sympathetic, supplying the radiating fibres of the iris. (b)

Scarcely any single point in physiology has given rise to so much discussion, and called forth so many experiments, with more fruitless results, than the one under consideration. This, however, can hardly excite in our minds the least surprise, when we review the immense difficulties which must necessarily attend the investigation of so intricate a subject. In this small organ, the iris, there are two sets of nerves and two sets of muscles, possessing diametrically opposite modes of action; and they are so arranged in relation to each other, that the result of paralysis in the one nerve or muscle, is identical with the result of stimulation applied to the other nerve or muscle, and *vice versa*. So that when a given effect is produced, the question immediately arises, "Is the effect due to the stimulation of the one nerve or muscle, or to the paralysis of the other nerve or muscle?" This is perfectly plain to us, when we remember, that stimulation of the circular fibres of the iris is followed by contraction of the pupil, and stimulation of the radiating fibres of the iris by dilatation of the pupil. On the other hand, paralysis of the circular fibres is followed by dilatation of the pupil, and paralysis of the radiating fibres by contraction of the pupil. Here, at the very outset, it is seen that the simple act of contraction and dilatation of the pupil, (even leaving aside altogether the question of nervous influence,) depends upon four causes. Next each muscle is supplied by at least one nerve, the circular by the third pair, the radiating muscle by the sympathetic nerve. Stimulation of the third pair produces contraction of the pupil; stimulation of the sympathetic, dilatation of the pupil. Paralysis of the third pair is followed by dilatation of the pupil; paralysis of the sympathetic, by contraction of the pupil. Thus it appears that we have the same complex phenomenon with regard to the nerves as was observed in the case of the muscles. Each movement, therefore, of the iris, whether of dilatation or contraction, is seen to depend on, or originate in, one of four causes. By putting this in a tabular form it will be made very plain.

Contraction of the pupil may originate in,

1. Stimulation of the circular muscle of the iris.
2. Stimulation of the third pair of nerves.
3. Paralysis of the radiating muscle of the iris.
4. Paralysis of the cervical sympathetic.

Dilatation of the pupil may originate in,

1. Stimulation of the radiating muscle of the iris.
2. Stimulation of the cervical sympathetic.
3. Paralysis of the circular muscle of the iris.
4. Paralysis of the third pair of nerves.

We have here left entirely out of consideration the effects of reflex action, such as contraction of the pupil following the application of light to the retina, &c. as it would render our subject more complicated, without being of the slightest use. A glance at the above table must have given the reader some idea of the difficulties which beset the path of the inquirer into the physiology of the movements of the iris; and he will not be astonished when told that the result of one experiment may lead the inquirer to imagine he has a stimulating effect to deal with, while the result of the next makes him believe it to be a paralyzing one. The evil connected with this investigation consists in the impossibility of performing an *experimentum crucis*

(b) Since this paper was in type, I have had my attention drawn to a very interesting and instructive communication by Professor Allen Thomson, in the *Glasgow Medical Journal* for the present month, in which Dr. A. Thomson agrees with Professor Wharton Jones and Mr. Bell in ascribing the action of atropine on the pupil to its stimulating the fibres of the sympathetic nerve.

on any one of the movements of the iris; and the misfortune is, that until a means of doing so can be devised, our theories will be liable to be changed, or subverted, by every new fact.

Before I made any experiments upon the action of atropine in dilating the pupil, I considered the old doctrine of its action, by causing paralysis of the third pair, as a most probable one; and even the results of my first experiments tended to confirm me in this opinion. A more minute investigation of the subject, however, gave me cause to modify these views;—and I now propose to relate the result, first of those experiments which supported the old doctrine, and next of those which led me to secede from it; thereby affording my readers the opportunity of forming opinions for themselves, and at the same time of judging of the validity of my conclusions.

My first experiment was performed at the suggestion of Professor Garrod, with the view of ascertaining if the preparations of belladonna had any direct stimulating action upon the cervical sympathetic. At that time it was not my intention to follow the subject any further; but the results of the first two or three experiments, instead of yielding me any satisfaction, only tended to pique my curiosity; and I was gradually drawn on, step by step, almost against my inclination, to investigate the action of atropine, not on the sympathetic only, but on the other nerves and muscles of the iris, and last of all to attempt the reconciliation of the various discrepancies occurring in the course of the experiments. In how far this object has been attained, I will leave my readers to judge.

In the early part of 1855, Professor Sharpey performed an experiment, in order to ascertain if atropine when directly applied to the cervical sympathetic would induce dilatation of the pupil; and in the beginning of last year Professor Sharpey and myself repeated the experiment upon a cat in the following manner:—

Application of atropine to the cut end of the sympathetic.—The left cervical sympathetic nerve was carefully dissected out from the neighbouring tissues for nearly two inches in extent, and divided; the pupil of the corresponding eye, immediately, or at least after the lapse of a very few seconds, became contracted, and permanently remained in that condition. The upper end of the divided nerve was now suspended in a strong solution of atropine, and notwithstanding that it was retained in the liquid during at least twenty-five minutes, no dilatation of the pupil occurred either then or throughout the day. This experiment I have again repeated with an exactly similar result, and I believe the same thing occurred in Professor Sharpey's first experiment. Atropine thus certainly appears to have no direct stimulating effect upon the sympathetic nerve in the neck, for had it stimulated as galvanism does, its application to the nervous substance of the cervical sympathetic would have been followed by dilatation of the pupil.

Effect of atropine when absorbed into the general circulation.—

Experiment 2.—On another occasion, while performing an analogous experiment upon a cat, a drop or two of the atropine solution accidentally fell upon the exposed muscles of the neck, and in a short time after absorption had taken place, the pupils of both the eyes became dilated, although in different degrees. The dilatation of the pupil in the sound eye occurred to such an extent that scarcely more than the border of the iris remained visible, while the pupil of the eye on the side where the sympathetic was divided became dilated only to about one-half, and remained in that condition during several hours. As the result of the first experiment negatives the idea of atropine exciting the nerve filaments supplying the radiating fibres through which the dilatation of the pupil is produced, we are led to the conclusion that, in the present case, the semi-dilatation may perhaps originate in, or rather depend upon, paralysis of the nerve supplying the circular fibres which govern the contraction of the pupil. We shall see in the sequel in how far the phenomena observed in another experiment tend to confirm this view.

Direct application of atropine to the conjunctiva.—*Experiment 3.*

—The conjunctiva of the right eye of a dog was moistened with a single drop of the solution of atropine. In half an hour the adjacent pupil became fully dilated, while the iris of the opposite eye was not observed to be in the least degree affected.

Effect of an excess applied to the conjunctiva.—*Experiment 4.*

—On another occasion several drops of the same solution were frequently brought into contact with the conjunctiva of one

of the eyes, and not only did the adjacent pupil become fully dilated, but also that of the other eye.

The results of these three last experiments induce me to coincide with the theory advanced by Mr. Benjamin Bell. According to his view, the atropine must have, in all three instances, passed into the circulation before making its presence known by its characteristic action upon the pupil. In the local application in Experiment 3 the quantity of the alkaloid employed, although extremely minute, was nevertheless able to reach the periphery of the nerves of the iris so speedily, as to be still sufficiently concentrated to produce dilatation of the pupil in the eye whose conjunctiva had been moistened with the drug; but, by the time it arrived at the heart, and became diffused through the general mass of the blood, it was too much weakened by dilution to be capable of acting either on the root, in the course, or at the periphery of the nerve supplying the *opposite eye* with sufficient power to cause dilatation of its pupil. On the other hand, in Experiments 2 and 4, the quantity of atropine (in the one case absorbed by the capillaries of the muscles of the neck, in the other by those of the conjunctiva and adjoining tissues,) was sufficient, notwithstanding its being first diffused through the general circulation, to reach the nerves of both irises in a state sufficiently concentrated to be able to cause dilatation of both pupils. Whether in the latter two examples the narcotic acted on the periphery, or on the roots of the nerves, it is impossible to say, but certainly in the case where the quantity of atropine employed was so minute as to have just sufficient strength to dilate one pupil, namely, the contiguous one, we are constrained to admit the possibility of the atropine having directly paralysed the periphery of the nerve. The origins of the nerves supplying the opposite eyes are so close together, that we cannot with any degree of feasibility suppose the atropine to have been transported by the general circulation to the root of the nerve before producing its effect. Had it been so, we would most certainly have had dilatation not only of one, but of both pupils; for it is natural to suppose that a similar quantity of poisoned blood would simultaneously arrive at the roots of each of the nerves supplying the two eyes. In Experiment 2, where the narcotic directly entered the general circulation, as well as in Experiment 4, where such an excess of atropine was absorbed by the conjunctiva, that not only the contiguous, but also the distant pupil was dilated, the supposition of the narcotic having acted upon the origins of the nerves appears to be not altogether unwarranted. At the commencement of this paper it was hinted, that the impairment of vision observed to follow the *internal* use of atropine, might be attributed to the narcotic effect of that substance on the origins of the nerves. It may be now further remarked, that the impairment of sight seems to depend, not so much on the characteristic action of the drug in deranging the movements of the iris, as on its enfeebling the sensibility of the optic nerve. When a considerable dose is taken, all the functions of external sense are more or less perverted; some, indeed, may even be for a time suspended. Belladonna or atropine fails to diminish the visual power when applied externally, for the very same reason as it fails under similar circumstances to produce dilatation of the distant pupil—simply from entering the general circulation in too small a quantity to reach the origin of the optic nerve in a sufficiently concentrated state to produce a narcotic effect. The impairment of vision may be looked upon as dependent on the following things:—firstly, the direct narcotic action of atropine upon the optic; secondly, the derangement caused by the excessive dilatation of the iris allowing the entrance of too much light; and lastly, the diminished power of focal adjustment in consequence of the paralysis of the ciliary muscle preventing the lens changing its position.

Experiment 5.—Effect of atropine after section of sympathetic.—Into the left eye of a cat whose pupil on that side had become permanently contracted, in consequence of excision of about an inch of the left cervical sympathetic, some solution of atropine was allowed to fall. In a short time the adjacent pupil became dilated, but not to the full extent. This agrees with the case narrated by Dr. Gairdner, “. . . in which contraction of the pupil was associated with an aneurism at the root of the neck, . . . and when repeated doses of belladonna, given internally, dilated both pupils. But it was observed throughout the experiment, that the affected pupil continued smaller than the other,” just as we have already seen in Experiment

2, where the sympathetic was artificially paralysed by division of its fibres. In the case related by Dr. Gairdner the same nerve would be paralysed by the pressure of the aneurism.

Effect of atropine after section of the third nerve.—Experiment 6.—The third nerve was divided at its point of exit from the sphenoidal fissure;—the pupil on the same side immediately dilated, and remained so. The addition of a couple of drops of atropine solution to the conjunctiva was not observed to increase visibly the dilatation of the pupil, as might have been expected from the observation of Dr. Struthers, who noticed that in the human subject belladonna acts upon pupils already dilated from some diseased condition of the third nerve. The cause of this discrepancy I believe to have subsequently ascertained. Some of the German Physiologists would have no difficulty in explaining this anomaly; for they believe that the circular fibres of the iris are supplied not only by the third pair of nerves, but also by the ophthalmic division of the fifth. This point, however, is still *sub judice*; for the results obtained from the experiments of different, and even of the same observers, are very contradictory. Professor Ruete (Wagner's “Handwörterbuch der Physiologie,” Band III., § 286) states, that a slight stimulus applied to the branches of the ophthalmic going to the ciliary ganglion is transmitted to the sympathetic nerve of the iris, and produces dilatation of the pupil. While a powerful stimulation of the ophthalmic itself, or of some other of its branches, is propagated to the third pair of nerves, and followed by a contraction of the pupil. From this it appears that the ophthalmic division of the fifth pair of nerves has no direct power over the movements of the iris.

As no marked effect was observed to follow the application of atropine to the conjunctiva after section of the third nerve, I divided the cervical sympathetic on the same side of the neck. The iris then gradually contracted, but not to the very marked extent observed in the cases where the sympathetic was alone divided. In fact, the pupil remained permanently, as nearly as possible, in a state of half dilatation and half contraction. The circular, as well as the radiating fibres of the iris, being paralysed by the section of their respective nerves, the contractile property of the muscular fibrillæ was brought into abeyance, and there could be, neither on the one nor the other side, an excess of action to produce either a condition of dilatation or contraction of the pupil. This, indeed, is an exactly similar condition to that which supervened when, after section of the sympathetic, a solution of atropine was dropped into the eye; and it does not appear unreasonable, in the present state of our knowledge, to impute the similarity of effect to a similarity of cause. According to the old theory, which as yet our experiments have given us no cause to question, the paralysis of the third pair of nerves would be, in both cases, regarded as the proximate reason of the pupil not contracting to the extent usually supervening on section of the sympathetic; while, again, the exciting cause of the paralysis would be, in one case, the knife, in the other the characteristic action of atropine.

During sleep the pupil is said to remain in general contracted, which is contrary to what might be expected from the observation of Dr. E. Weber, who found that the radiating was more powerful than the circular muscle of the iris;—for on applying an equally strong stimulus to both muscles, the pupil became considerably dilated. During some time past, I have been trying to ascertain the most general state of the pupil after death, but have found it as yet impossible to come to any definite conclusion. I have frequently seen it in all the various intermediate states between contraction and full dilatation, (even in death resulting apparently from the same cause), but seldom in the extreme conditions,—of the two extreme conditions, that of dilatation more frequently than that of contraction. In mentioning this, however, it must be kept in mind, that small statistics are very dangerous, as the conclusion to be drawn from 50 might be very different from the result of 50,000. It would, therefore, perhaps be better to leave aside the consideration of this point until we obtain more numerous data.

It may be well to sum up the results of the foregoing experiments, before any more are cited. We have seen, both in the experiment performed by Professor Sharpey and by myself, (c) that atropine does *not* cause dilatation of the pupil by

(c) Professor Budge, of Bonn, performed the same experiment with an exactly similar result.

directly stimulating the sympathetic; that to act upon the pupil it must first be absorbed, and that the absorption may be local or general; and lastly, we might feel ourselves justified, from the results of the experiments here related, in continuing to attribute the influence of atropine upon the movements of the iris, to its possessing the power of paralysing the third pair of nerves, were it not that the results obtained from the experiments which we shall now relate, throw considerable doubt on the correctness of the old doctrine.

(To be continued.)

THREE CASES OF OVARIAN DROPSY INJECTED WITH TINCTURE OF IODINE,

WITH REMARKS.

By ROBERT GEORGE HARDWICK,
House-Surgeon to the Leeds General Infirmary.

Mary Kenny, aged 24, was admitted into the Leeds General Infirmary under the care of Mr. Teale, August 1, 1856. She is a thin, healthy woman, unmarried, but has had a child a year and a half ago. She states that last July she noticed a tumour in the left iliac region, which continued increasing till April 17 of this year, when she was tapped, and 34 pints of thick, dark, albuminous fluid removed. The cyst, after having been tapped, collapsed into the lower part of the abdomen, being apparently quite free from adhesions. She has been subject to frequent attacks of erysipelas of the face. Bowels and menstruation regular. Pulse 60. Appetite good.

On August 14, at 2 p.m., she was tapped, 29 pints of fluid being removed, and Mr. Teale injected $\frac{1}{2}$ a pint of the Edinburgh tincture of iodine. The fluid was glutinous, clear, and almost transparent; it contained a large amount of albumen. There was no pain during the operation, excepting a little smarting when the canula was withdrawn, probably owing to the tincture touching the wounded skin. She became unconscious about two hours after the operation, with dilated pupils, restlessness, and constant vomiting. Pulse feeble, 120.

15th.—She did not recover her consciousness till 7 this morning. She has vomited frequently, the matter having a yellowish-green colour, and smelling distinctly of iodine. The abdomen is soft, and perfectly free from pain. Pulse 118. Skin hot and dry. She has not made water since the operation, so the catheter was introduced to-day. The urine and vomited matter were found to contain large quantities of iodine. She was ordered 1 drop of prussic acid in a dessert spoonful of water every half-hour, till the vomiting was checked, and an injection of beef-tea, op. tr. opii mxv., brandy ʒj., every four hours.

16th.—The vomiting continues, but it is not so distressingly frequent. Abdomen soft, and free from pain, even under pressure. Skin hot. Pulse 110. Tongue coated with a thick yellow fur. Thirst very urgent. Urine and vomit still contain iodine. Ordered a blister to the stomach.

18th.—She still vomits, but less frequently, the matter having the same green tinge, and containing iodine in abundance. Pulse 108. Tongue as before. Much thirst. Urine still shows the presence of iodine.

20th.—The bowels were opened yesterday, for the first time since the operation, and again to-day. Pulse 100. Tongue beginning to clean down the middle. Slight vomiting. A small patch of erysipelas has commenced on her forehead. The secretions were carefully analysed for iodine both yesterday and to-day. The vomit, urine, and saliva responded readily to the test, but none could be detected in the stools, breath or perspiration. Ordered to have the injections every six hours.

24th.—The sickness has quite abated, and her tongue is perfectly clean. Iodine has been detected daily in the saliva, but this morning none can be found. The urine still contains a small quantity. The erysipelas, which never reached a great extent, is rapidly fading. Ordered to have the injection twice a-day, and to take a little mild food by the mouth.

26th.—No iodine can be detected in the urine to-day. She is free from symptoms except weakness.

This patient continued in the Hospital several weeks, on account of her strength being rather reduced. During this time her abdomen increased two inches in circumference; but there was never at any time either pain or tenderness. I had

the opportunity of examining her to-day, now nearly four months since her operation. The circumference of the body at the umbilicus was an inch less than when she left the Hospital. The sac, still containing a very small amount of fluid, occupied the front of the abdomen, filling, but not distending it. She has quite regained her strength, and for some time has followed her usual occupation.

Eliza Chew, aged 28, was admitted into the Leeds General Infirmary, under the care of Mr. Hey, Nov. 4, 1856. She is a single woman, and has suffered from ovarian dropsy for six years, having been tapped ten times during the last four years. On Nov. 8, twenty-nine pints of thick albuminous fluid were removed, and half a pint of the compound tincture of iodine (P. L.) injected. She did not suffer pain at all from the operation, excepting during the introduction of the trochar, and the removal of the catheter and canula. Ten minutes after the operation she complained of a feeling of sickness, and a dry, burning sensation in the throat. Two hours after, the burning of the throat and thirst had increased; she also felt a numbness in her face, and slight dimness of vision. Her pupils were natural, but her eyes were suffused. In a little time she became restless, frequently sighing and yawning. Besides these symptoms there was dizziness, and a sensation of fulness in the head, general numbness of the skin, and listlessness; pulse 120, firm. Iodine could be detected in abundance in the urine, tears, and saliva, but not in the breath.

Nov. 9.—There has been no delirium or insensibility, but she has slept well. Tenderness on deep pressure is felt all over the abdomen, but chiefly on the left side. Tongue red and glazed in front, but furred behind. Slight thirst. In the afternoon her pulse became fluttering, above 160, and her breathing high. Bowels open. Vomiting frequent, but very small in quantity. She was ordered a dessert spoonful of brandy to be given frequently.

10th.—She has still a feeble, fluttering pulse, about 160; respirations, 40; skin hot and dry. She feels very low, but has no pain. She complains of a heaving sensation in her forehead, soreness of her eyes, dryness and stuffing of the nostrils, throat burning and great thirst, dry cough and rattling in the trachea. There is still the deep tenderness in the abdomen. Tongue more glazed. Bowels opened three times to-day; stools loose, but of healthy appearance. Urine feels hot in passing; it is abundant in quantity, of sp. gr. 1027. Iodine is present plentifully in the urine, stools, saliva, and tears; but none in the breath or perspiration. When the urine was diluted with 1000 parts of water, iodine could still be detected. Ordered mild liquid food; blister to the left side.

11th.—She has slept little during the night. Tongue moist, and less thirst. The abdominal tenderness is diminished, but there is much soreness of the voluntary muscles, especially in the legs. There is a sensation of throbbing in the head, as well as heaviness. Other symptoms as before. Bowels still relaxed. Pulse firmer, 136; respirations, 34.

13th.—She has lost the heaviness in her brow, and stuffing of the nose. There is still also some deep tenderness in the abdomen, and soreness of the limbs. The smarting and tenderness of the eyes have quite ceased. Tongue red and raw-looking. Thirst abating. Skin cool, and perspiring slightly at nights. Pulse, 112; respirations, 30. Iodine can be detected in the same secretions as before, with the exception of the tears.

14th.—The burning of the throat has ceased, but there is a little dryness still. There is no abnormal sensation in the nose or chest, and only a slight feeling of weight in the forehead. Tongue sore and aphthous. Scanty purging continues. Urine and stools still feel hot when passing. Pulse, 120; respirations, 30. Iodine abundant in stools and urine; very slight in the saliva.

17th.—The abdomen has been increasing in size for two or three days, and is now very prominent in front. The distension appears to depend chiefly on flatus, for the abdomen is very tympanitic throughout, excepting a small amount of dulness on the right side and groin, where the tumour first commenced. She is troubled with nausea and retching, and there is tenderness over the stomach. Tongue and mouth red, and very aphthous. Pulse 112, feeble. Scanty purging continues. The stools and urine have ceased to feel hot on passing. Iodine cannot be detected in any of the secretions. Ordered mucilage and water for a drink, and injection of beef-tea, brandy, and laudanum.

21st.—She is much weaker. Pulse 120, feeble; spirits de-

pressed. Thirst distressing; mouth very aphthous; voice hoarse. Abdomen still increasing, the distension being now partly owing to fluid as well as flatus.

27th.—She is gradually sinking. Abdomen much larger; great increase of fluid. There is still marked tympany at the part of the abdomen that happens to be uppermost. The dullness which was present formerly on the right side is now replaced by resonance when she lies on her left side. Mouth less sore. Stools loose. She continued to sink till the 30th, when she died.

Post-mortem examination, made 17 hours after death.—Body much wasted; abdomen distended and very prominent. Lungs not adherent; slightly congested, otherwise healthy, excepting one or two dry cretaceous tubercles at the left apex. Bronchial tubes red and inflamed. Heart of natural size and healthy throughout, with the exception of one of the aortic valves, which had the free edge of the lunula torn from the rest of the structure, so as to appear like a fine thread stretched from each side across to the corpus Arantii. There was no evidence of inflammation, and the valve would be quite efficient. On opening the abdomen a large cyst was found, occupying the whole of the front, shutting the viscera in behind. It was slightly adherent throughout to the front wall of the abdomen, but could be easily separated by the hand; at one or two points this adhesion seemed more recent, showing unhealthy soft lymph and some pus. The posterior surface of the tumour was smooth, glistening and entirely free. The cyst contained a large quantity of fetid gas, and about two gallons of turbid fluid, with flakes of unhealthy lymph floating in it. Its walls were thin, and lined internally with slightly adherent lymph of a similar character. The tumour had originated in the right ovary, and was connected with the uterus by a long band, being the broad ligament lengthened out to about double its usual extent. Besides the large cyst described, it contained at its base another, about the size of a child's head, and seven or eight smaller ones, all of which, with the exception of two very little ones, were filled with a turbid fluid, similar to that of the large sac. They did not communicate at all. The left ovary was degenerated into a small cyst, of about the size of a walnut, containing clear, glairy fluid. The uterus itself was healthy. The peritoneal coat of the bowels showed ridges of reddened lymph where they came in contact, but were not adherent. The mucous membrane of the œsophagus was injected, and at parts showed slight aphthous exudation. This appearance extended a little way into the stomach, which was otherwise healthy. The mucous membrane of the small intestine was rather vascular at one or two points, but nothing remarkable. The lower end of the sigmoid flexure and the rectum were red and inflamed. The peritoneal coat of the liver was thickened and opaque in one or two large white patches, the result of old inflammation. Spleen rather large. Kidneys healthy.

I may here state that Mr. Hey did not recommend this operation to the patient, but having seen the result in the former case, she was very anxious to have the same means tried. After hearing the dangers fairly explained, the patient still wished to undergo the operation, so Mr. Hey consented to perform it, though he did not consider the case a very promising one.

Through the kindness of Mr. Teale, I was present when he operated on the following case, which occurred in his private practice. I am also indebted to him for the notes.

Mrs. S., aged 56, the mother of 11 children, became the subject of ovarian dropsy just after the cessation of the catamenia, 5 years ago. She has only been tapped once, now 12 months since, and no secondary cyst could be felt after the fluid was evacuated. In July, 1856, the sac was again tapped, 32 pints of fluid being removed, after which half a pint of the Edinburgh tincture of iodine was injected. There was no pain at the time of the operation, except the smarting on withdrawing the catheter. Forty drops of laudanum were given after the operation, and in about an hour she became unconscious, and remained so 14 hours. She never suffered at all from pain or tenderness in the abdomen, and in a week was so far recovered as to go about the house dressed. I saw this patient yesterday, now nearly five months since the injection. Her health was perfect, and the tumour measured exactly the same as after the tapping.

(To be continued.)

STATISTICS OF DEATHS FROM PYÆMIA

BEFORE AND AFTER THE INTRODUCTION OF CHLOROFORM;
AND OF MORTALITY AFTER AMPUTATIONS, DURING THE
LAST SIX YEARS IN ST. GEORGE'S HOSPITAL.

By T. HOLMES, Esq., F.R.C.S.

IN a recent article in your paper you called attention to the question mooted by Dr. Arnott as to the influence of chloroform upon the result of surgical operations, and urged on your readers the importance of adducing facts and not merely opinions bearing upon this point. As one of the first to question the propriety of Dr. Arnott's assertions I feel in an especial manner bound to contribute the result of the recorded statistics of the Hospital to which I have been for some years Registrar; and had already determined upon doing so before I saw your article in print. I can only regret that I have not more perfect information to offer. This, however, is due to the neglect of hospital statistics, which was universal in England until within a few years, and which is only too common at present. The very existence of the present controversy is a proof of the importance of such statistics. Could it have been for a moment a matter of doubt as to what had been the effect upon mortality of such a great change as the introduction of chloroform, if trustworthy and sufficient data had been at hand for the determination of the average mortality before and after that event? The fact is, however, that no such statistics have as yet been produced for a sufficient period antecedent to 1848 in London hospitals, and that for the later years the records are anything but complete. Thus, in looking over the books of St. George's Hospital I found that the registers had been so imperfectly kept in earlier years that it was impossible to discover how many operations had been performed, and, therefore, what had been the ratio of deaths; and it was not till after the introduction of chloroform that we had any reasonable assurance that the operations had all been noted. This, however, I assume to have been the case during the last six years, at any rate all the deaths have been noted—so that if there is any error in the calculation it must be that the ratio of deaths is stated too high. As amputation is the operation most usually selected as a test, and as it is the one on which satisfactory details are most likely to be furnished from other sources, I have added up the cases of amputations (not including those of portions of the hand and foot) which I find in our books for the six years, 1851-56 inclusive. The number is 107; the number of deaths 32, or 29.9 per cent. This number includes three years, 1853-55, in which pyæmia has been unusually prevalent, and may, therefore, be taken as by no means a favourable statement of the case. I also append a table of the deaths from pyæmia for the 13 years 1844-56 inclusive, as stated in our post-mortem books, which have been accurately and completely kept only during that period. I may mention that I have included all those cases in which the death is clearly shown to have been the result of this condition of the blood, but have passed over a very few cases (not in the list of operations) in which the description did not enable me to form a positive conclusion. The table shows (as far as it extends, for, of course, the experience of our Hospital is not sufficient to prove the case) that the average of deaths by pyæmia after operations under chloroform has fallen below what it was in similar cases before the introduction of that anæsthetic, and this although operations are now performed more frequently than before, and although the Hospital has been enlarged by the addition of nearly 30 beds, more of them for surgical patients. It shows, also, that deaths from pyæmia in other cases have uniformly increased in each year except one, in 1848, in about the same ratio as those after operations; and thus entirely negatives the idea that any special cause applicable only to the latter class of cases has been at work to produce the increased mortality from secondary suppuration, which has been observed in some of the late years.

I know it will be said that a table showing 30 per cent. as the mortality after amputations of all kinds contrasts unfavourably with the experience of Surgeons before the introduction of anæsthetics. This, however, I do not believe to be the case. I have searched carefully in the Medical Journals, and the only sufficiently extended statistics I can find at all bearing on the subject are contained in a paper by Mr. B. Phillips, read before the Medico-Chirurgical Society, *Medical*

Gazette, Vol. XXII. This gives 23 per cent. as the mortality on a total of a large number of hospitals, metropolitan and provincial, in the former of which we may be sure that the mortality was much above the average, far higher, therefore, than the imperfect tables adduced by your correspondent, Dr. Arnott, would show. If any one wishes to see what was the mortality before chloroform in the hospitals of a large city let him consult the memoir of M. Malgaigne (*Arch. Gén. de Médecine*, April, 1847), or Nélaton (*Path. Chir. i.*, 237). The general mortality is 40 per cent., though the list is swelled by cases of amputations of fingers and toes. Amputations of the thigh give 62 per cent. of deaths; of the leg, 55; of the arm, 45; of the forearm, 28. I do not believe that the mortality ever stood at this frightful amount in London hospitals, neither can I suppose that our metropolitan surgery was so perfect as to have counterbalanced the depressing influences of a great city, and reduced the average below that of the country generally.

TABLE I.

Mortality after Amputations in St. George's Hospital, 1851 to 1856 inclusive.

Year.	Number of amputations.	Number of deaths.
1851	14	4
1852	22	3
1853	23	9
1854	18	7
1855	16	7
1856	14	2
Total . . .	107	32=29.9 per cent.

TABLE II.

Mortality from Pyæmia after Operations and in other Cases in St. George's Hospital, 1844 to 1856 inclusive.

Previous to Chloroform.

Year.	Number of deaths from Pyæmia after operation.	Number of deaths from Pyæmia after other cases.	Total.
1844	7.	12.	19.
1845	6.	9.	15.
1846	2.	14.	16.
1847	6.(a)	12.	18.

Total 21 (5.25 per annum) 47 (11.75 per annum)

Subsequent to Chloroform.

Year.	Number of deaths from Pyæmia after operation.	Number of deaths from Pyæmia after other cases.	Total.
1848	7(b)	4.	11.
1849	2.	10.	12.
1850	3.(b)	10.	13.
1851	5.	11.	16.
1852	2.	5.	7.
1853	7.	14.	21.
1854	6.	20.	26.
1855	7.	12.	19.
1856	4.	7.	11.

Total 43 (4.77 per annum) 93 (10.33 per annum)
4, Vigo-street, January 20, 1857.

THE LONDON

PRACTICE OF MEDICINE AND SURGERY.

STATISTICAL REPORT OF THE PRINCIPAL OPERATIONS

PERFORMED DURING THE LAST THREE MONTHS OF 1856.

The subjoined report includes, as usual, the following Hospitals:—University College, King's College, St. Bartholomew's, St. George's, Guy's, St. Thomas's, the London, the Middlesex, the Westminster, Charing-cross, St. Mary's, the Metropolitan Free, the Marylebone, the Hospital for Sick Children, and the "Dreadnought" Seamen's Hospital.

LITHOTOMY.

Number of cases, 13; recovered, 10; died, 3.

Case 1.—Guy's: Mr. Cock.—A healthy boy, aged 4.—

(a) 2 with ether.

(b) 1 probably without chloroform.

Calculus the size of a greengage-stone, composed of lithic acid. Recovered well. Case 2.—Guy's: Mr. Hilton.—A lad, in fair health, aged 16, for long subject to stone. Calculus, oxalate of lime, crusted with phosphates. Recovered well. Case 3.—Guy's: Mr. Callaway.—A boy, aged 14, in good health. Symptoms of four years' duration. The stone broke in removal, and was extracted in four pieces. Recovered. Case 4.—The London: Mr. Adams.—A boy, aged 7, in fair health; symptoms of stone of three years' duration. The calculus weighed an ounce. Recovered. Case 5.—The London: Mr. Ward.—A stout but unhealthy boy, aged 2½. The operation was performed by Allerton's method, and two small calculi, the size of peas, were removed. Erysipelas followed, but the boy made a good recovery. Case 6.—The London: Mr. Curling.—A man in very bad health; supposed to be the subject of renal disease, the subject of stone for three years. He was so ill that Mr. Curling advised the operation should not be performed, and it was done only at his own urgent request. A large oval flattened stone was removed, consisting of lithic acid, lithate of ammonia, and oxalate of lime. Freë hæmorrhage from the deep part of the wound rendered plugging necessary. He recovered well, and much improved in health. Case 7.—St. George's: Mr. Tatham.—A boy, aged 3, in good health. Stone about the size of a bean. Recovered. Case 8.—St. Thomas's: Mr. Simon.—A man in fair health, aged 60, the subject of enlarged prostate. The symptoms were of ten years' duration. The calculus weighed nearly three drachms. Some hæmorrhage occurred during the night after the operation, and subsequently he passed into a typhoid condition, and had pyæmic abscesses in the arms. Death. Case 10.—St. Bartholomew's: Mr. M'Whinnie.—A boy, aged 3, in fair health; symptoms of three months' duration. Stone of medium size. Recovered well. Case 11.—King's College: Mr. Fergusson.—A man, aged 56, in good health. A large lithic acid calculus was removed. Recovered. Case 12.—St. Bartholomew's: Mr. M'Whinnie.—A man, aged 26, in poor health. The nucleus of the stone was a piece of sealing-wax. Much hæmorrhage followed the operation, and he sank on the sixth day. For the details of this case see the *Medical Times and Gazette* for December 13, 1856, page 591. Case 13.—St. Bartholomew's: Mr. Lawrence.—A boy, aged 13, in impaired health. Symptoms of stone for three months. The calculus was about the size of a filbert. He progressed favourably up to the seventeenth day, when symptoms of acute pyæmia developed themselves. Death took place on the nineteenth day. At the autopsy purulent depôts were found in the lungs and liver, and also a small circumscribed collection of pus in the corpus spongiosum external to the urethra. No phlebitis could be discovered after careful search.

LITHOTRITY.

Number of cases, 6; recovered, 3; under treatment, 2; died, 1.

Case 1.—The London: Mr. Luke.—A lad, aged 19, admitted in August. The calculus was a mulberry one, and very hard. It has been crushed nine times since his admission, and about an ounce of fragments removed. Chloroform was not given, and on the whole the operations have been well borne. The whole of the stone is now supposed to have come away.

Case 2.—St. George's: Mr. Tatum.—A man, aged 65, previously reported and believed to have been cured. A fragment had, however, remained behind, and, becoming troublesome, he was re-admitted, and crushing again performed. Well.

Case 3.—St. Bartholomew's: Mr. Stanley.—A man, aged 58, under care two years ago, and discharged in consequence of abscess in the testicle having followed the crushing of the stone. Portions of calculus were known to have remained behind. He continued, however, tolerably comfortable until within a few months, when, the symptoms returning, he again sought admission. Several lithotritty sittings have been had, and a great number of fragments have come away. The case is doing well, the man being in fair health.

Case 4.—St. Bartholomew's: Mr. Skcy.—A man, aged 61. Symptoms of calculus had existed two years previous to the first operation, which was performed on October 18. It has since been repeated eight times, at intervals of from five to ten days. Many fragments of a lithic acid stone have been passed. He has suffered from catarrh of the bladder and

swelling of the testicle, and, more latterly, from a severe attack of articular rheumatism. Another operation will, probably, be required.

Case 5.—St. George's: Mr. Hawkins.—A man, aged 37, in good health. He had been treated by lithotripsy by the late Mr. Avery (12 sittings) in 1853, but a small portion of stone had probably been left in. Mr. Hawkins crushed it at five sittings, and he left the Hospital well.

Case 6.—St. George's: Mr. Hawkins.—A man, aged 70, whose case has been previously mentioned. The stone was very large and hard, consisting principally of lithic acid. It had been crushed fifteen times, and although many fragments had come away, yet a large portion remained. He died of pyæmia, the kidneys and one lung containing secondary deposits.

HERNIOTOMY.

Number of cases, 25. Recovered, 10. Under treatment, 1. Died, 14.

Case 1.—The London: Mr. Luke.—A woman, aged 65; hernia femoral, strangulated forty-eight hours; sac not opened. The bowels acted immediately after the operation, and she recovered without a bad symptom. *Case 2.*—The London: Mr. Luke.—A woman, aged 59; hernia femoral, the size of a hen's egg; strangulated eight hours. Sac not opened. Recovered well. *Case 3.*—The London: Mr. Wordsworth.—A woman, aged 40; hernia femoral, small; strangulated fourteen hours; symptoms severe. In the operation neither the sac nor the fascia propria was opened. Opiate treatment. Bowels acted spontaneously on the next day. Recovery. *Case 4.*—Guy's: Mr. Cooper Forster.—A woman, aged 43, who had been confined only nine days previous to her admission. Hernia femoral, the size of an egg, and strangulated thirty-two hours. The taxis had not been abused, but tartar emetic had been administered. The symptoms were not very severe. Sac opened. Recovered. *Case 5.*—Guy's: Mr. Cooper Forster.—A woman, aged 60; hernia femoral; strangulated thirty-six hours. Sac opened. Recovered. *Case 6.*—St. Bartholomew's: Mr. Lawrence.—A boy, aged 2; hernia inguinal; strangulated twenty-two hours; sac not opened. Recovered. *Case 7.*—St. Bartholomew's: Mr. Lawrence.—An emaciated woman, aged 57; hernia femoral; strangulated 36 hours. The sac was opened. All the tissues were seen to be bloodless and matted together: the intestine was dark-coloured, and a faecal odour was perceptible. She progressed well without a single bad symptom, to the 12th day, when some faecal matter came through the wound. The artificial anus has since remained open. Under treatment. *Case 8.*—Guy's: Mr. Poland.—A man, aged 65, who had been operated on in 1847, by Mr. Cock. Hernia oblique, inguinal, size of a walnut, and strangulated three days. Reduction en masse had been effected by a surgeon before admission. It had been almost wholly returned, but the symptoms persisting, and there being still some fulness at the internal ring he was sent to the hospital. For a day the symptoms were slight, but they returned on the second day, and were severe and well marked. No hernia now existed, but on coughing in the erect posture a fulness was produced. An exploration was made, and the sac found to have been pushed up. It was dragged down and opened, but contained nothing but fluid. The relief to the symptoms following the operation was so immediate and marked that there could be no doubt that the strangulated bowel had been liberated. Recovered. *Case 9.*—The London: Mr. Luke.—A man, aged 56, the subject of a large irreducible scrotal hernia, which had existed twelve years. Strangulation five hours. The sac was opened to a very limited extent, immediately below its neck, and the latter divided. A small portion only of the intestine was returned, the remainder being too closely adherent. Threatenings of peritonitis showed themselves on the following day, but were successfully combatted by calomel and opium. Recovered. *Case 10.*—St. Thomas's: Mr. South.—A woman, aged 49; hernia femoral, small; strangulation four days; sac opened. Recovered. *Case 11.*—The London: Mr. Wordsworth.—A woman, aged 40; hernia femoral, the size of a pigeon's egg; strangulated six hours; symptoms not very urgent. The sac was not opened. Bowels acted spontaneously on second day. Recovered rapidly. *Case 12.*—The London: Mr. Luke.—A woman, aged 49; hernia femoral, the size of an egg; strangulated 50 hours; condition urgent. An attempt to avoid opening the sac was made but failed, and it was accordingly opened. The intestine was returned, but a

mass of omentum left *in situ*, being firmly adherent. Opium treatment. Although much relieved, she remained very low. Peritonitis set in on the second day, and she died on the fourth. No autopsy. *Case 13.*—University College: Mr. Quain.—A man, aged 42. The hernia, stated to have been a right bubonocoele, the size of a hen's egg, had been reduced before admission. Admitted two days after the reduction, with very urgent symptoms of strangulated bowel. Enemata having failed, the inguinal canal was opened, and exploration made with, however, no result. In spite of the free use of opium the symptoms increased, and he died on the following day. At the autopsy a knuckle of gangrenous intestine was found constricted by a band of lymph. There was also extensive peritonitis. *Case 14.*—University College: Mr. Quain.—An emaciated man, aged 57; hernia femoral; strangulated four days; symptoms severe. An attempt was made to avoid opening the sac, but failed. The sac contained no fluid. For a few days he seemed to be doing well, but œdema of the scrotum and penis came on, and peritonitis. He died on the fourth day. The autopsy showed extensive fatty degeneration of the viscera, and a coil of bowel was found twisted on itself, flaccid and gangrenous. *Case 15.*—Guy's: Mr. Cock.—A man, aged 51; hernia femoral; the size of a hen's egg; strangulated fourteen hours. His condition was favourable, the operation was very short, and the sac not opened. Peritonitis came on next day, and, in spite of free treatment with calomel and opium, death resulted on the third day. The bowels had not acted, and no purgative had been given. *Case 16.*—St. Thomas's: Mr. Solly.—A woman, aged 49. Hernia femoral; strangulated four days; sac opened, and gut found intensely congested. Collapse followed by death, on the third day. At the autopsy, the bowel was found to have given way at the seat of stricture. *Case 17.*—University College: Mr. Erichson.—A woman, aged 46, in delicate health, and the subject of an irreducible femoral hernia. Symptoms of strangulation for four days, imperfect, but increasing in severity. The sac was not opened. The bowels acted spontaneously on the day following the operation, but the peritonitis continued to increase, and death occurred on the third day. At the autopsy, a small portion of congested omentum was found in the femoral canal. *Case 18.*—Guy's: Mr. Callaway.—A man, aged 22. Hernia scrotal; strangulated forty-five hours. The sac was opened, and found to contain a knuckle of bowels and a large piece of omentum. Erysipelas followed around the wound, and sloughing of the sac. Death from acute peritonitis on the seventh day. *Case 19.*—Guy's: Mr. Hilton.—A woman, aged 75. Hernia femoral; strangulated five days. The sac was opened, and the bowel was found to have given way in two places, the openings communicating with the peritoneal cavity. Death from peritonitis the following morning. *Case 20.*—Guy's: Mr. Cooper Forster.—A man, aged 56. Hernia inguinal, of large size; strangulated ninety hours. Symptoms not very severe. The sac was opened, and found to contain coils of small intestine, at least a foot and a half long. The gut was much congested, and had some patches of lymph on its surface. Acute peritonitis, attended by profuse diarrhœa, followed, the sac sloughed, and the patient died ninety-five hours after the operation. The autopsy showed a thin layer of slough at the seat of stricture, and the portion of bowel which had been down was very deeply congested. *Case 21.*—Guy's: Mr. Cock.—A woman, aged 53; in good state. Hernia femoral; strangulated ten hours; sac not opened. Slight hæmorrhage occurred at the time of operation, and a piece of sponge was placed in the wound, which completely arrested it. The patient sank, and died on the second day. At the autopsy the sac was found unopened, and the peritoneum uninjured; between the peritoneum and the abdominal walls, however, was an enormous quantity of extravasated blood, fully accounting for death. The artery from which the bleeding had occurred was not found, owing to the imperfect manner of making the examination. It was presumed to have been from the obturator. *Case 22.*—King's College: Mr. Bowman.—A woman, aged 40. Hernia femoral; strangulated fifty-six hours; sac opened. The gut was found to be nearly gangrenous; it was, however, returned. Death next day. *Case 23.*—St. George's: Mr. Cutler.—A woman, aged 27. Hernia femoral, small; strangulated three days. The sac was opened, and contained a knuckle of intestine and some fluid. Death from peritonitis and incipient gangrene of the gut. *Case 24.*—St. George's: A man, aged 57. Hernia strangulated many

hours; sac opened. Death from internal strangulation. The autopsy showed strangulations of a portion of the ileum by a band of membrane passing across it. *Case 25.*—The London: Mr. Wordsworth.—A woman, aged 73; bedridden for several years; hernia femoral, the size of a hen's egg; strangulated twenty-four hours. An attempt was made to operate without division of the sac, but failed. The neck of the sac was very long, and it having been divided, the intestine was easily returned. All did well as regards the bowel. Death from exhaustion six weeks after the operation. Abscess found in the pleura.

AMPUTATIONS.

Number of cases 48 Recovered 32. Under treatment 5. Died 12.

At the Hip-Joint.—*Case 1.*—Charing Cross: Mr. Hancock.—A man, aged about 30, under care on account of extensive necrosis of the femur. He was in very bad health, and the disease was such that amputation was deemed the only measure. It was proposed to amputate through the great trochanter, but the neck of the bone being found to be diseased, Mr. Hancock removed the limb at the hip-joint. A considerable part of the flap united by first intention, and the man made an excellent recovery.

Of the Thigh.—*Case 2.*—Guy's: Mr. Cock.—A man, aged 34, in bad health, and sinking from old disease of the knee-joint. Amputation. Recovered. *Case 3.*—University College: Mr. Quain.—A girl, aged 12, the subject of necrosis of the lower end of the femur, of six years' standing. She had been under care several months, and unsuccessful attempts had been made to remove the diseased bone. Amputation. Recovered. *Case 4.*—University College: Mr. Erichsen.—A boy, aged 4½, the subject of acute disease of the knee-joint. Incisions had been made into the joint a few days previous to the operation. He was in a very feeble state at the time of amputation. Recovered. *Case 5.*—St. George's: Mr. Hawkins.—A strumous boy, aged 13. Amputation on account of disease of the knee-joint. Recovery. *Case 6.*—St. George's: Mr. Hawkins.—A woman, aged 37, the subject of rheumatism. Amputation on account of chronic disease of the knee. Under treatment. *Case 7.*—St. Bartholomew's: Mr. Lawrence.—A delicate, strumous girl, aged 16. Amputation on account of chronic disease of the knee-joint. Recovered. *Case 8.*—St. Thomas's: Mr. South.—A man aged 29. Amputation on account of acute disorganisation of the knee, followed by partial ankylosis. Recovery. *Case 9.*—St. George's: Mr. Hawkins.—A boy, aged 15, in fair health. Amputation on account of strumous disease of the knee. Recovery. *Case 10.*—The London: Mr. Luke.—A boy, aged 15. Admitted on account of severe contusion of the left knee. Abscesses involving the joint followed, and he was reduced to a state of great exhaustion. Amputation six weeks after the accident. Recovery. *Case 11.*—The London: Mr. Curling.—A girl, aged 9, in good health, from whom, in March, 1855, a recurrent fibroid tumour had been removed from the calf. The disease had returned, and had involved the muscles so extensively as to necessitate amputation above the knee. (See report of the Pathological Society.) Recovered. *Case 12.*—St. George's: Mr. Pollock.—A boy, aged 8, admitted on account of his leg having been torn off at the knee by being caught in a cab-wheel. Primary flap amputation of the thigh. *Case 13.*—King's College: Mr. Partridge.—A lad, aged 17, admitted on account of acute periostitis of the tibia. The knee-joint was not involved, but he sank into such a feeble state, that amputation became the only resource. Recovered. *Case 14.*—The London: Mr. Adams.—A woman, aged 29, the subject of chronic disease of the knee-joint. Amputation. Recovery. *Case 15.*—Guy's: Mr. Cock.—A man, in good health, aged 30. A tumour, the size of a child's head, had developed itself in the course of eight months, in connexion with the head of the fibula, and projected backwards into the popliteal space. Amputation through the thigh. Recovery. The disease proved to be myeloid. *Case 16.*—Guy's: Mr. Hilton.—A man, aged 30, the subject of disease of the knee-joint, and in good general health. Amputation. Death on the tenth day from exhaustion, consequent on secondary hæmorrhage. *Case 17.*—St. Thomas's: Mr. M'Murdo.—A man, aged 30, in very bad condition from gangrene of the leg, after ligature of the femoral artery for aneurism. (See Compression Treatment of Aneurism.) Amputation was performed, but he sank gradually, and died on the

fifth day. *Case 18.*—The London: Mr. Luke.—A man, aged 48, admitted on account of compound comminuted fracture of the leg. Primary amputation. Death from exhaustion on the second day, the patient having never thoroughly recovered from the shock of the accident. *Case 19.*—University College: Mr. Quain.—A man, aged 67, admitted on account of compound fracture. Primary amputation, continued collapse, and death forty-eight hours afterwards. At the autopsy, general fatty degeneration of the organs was found.

Of the Leg.—*Case 20.*—The London: Mr. Adams.—A woman, aged 52. Amputation on account of disease of the ankle-joint, consequent on having run a nail into the foot twenty-five days before. She was much exhausted after the operation. Recovered. *Case 21.*—The London: Mr. Wordsworth.—A lad, aged 17, in good health. Primary amputation on account of gunshot wound of the ankle. Recovered. *Case 22.*—St. Bartholomew's: Mr. Lawrence.—A feeble old man, aged 64. Amputation on account of disease of the tarsus, of ten months' duration. Recovered. *Case 23.*—Middlesex Hospital: Mr. De Morgan.—A lad, aged 20, in fair health. Amputation on account of diseased ankle-joint, of ten months' duration. *Case 24.*—St. Bartholomew's: Mr. Lloyd.—A woman, aged 42. Amputation on account of extensive disease of the tarsus, after two years' duration. Recovered. *Case 25.*—Westminster Hospital: Mr. Moore.—A man, aged 60. Amputation on account of diseased ankle-joint, of six months' duration. Death from pyæmia on the 18th day. *Case 26.*—Guy's: Mr. Hilton.—A woman, aged 24, in good health, the subject of congenital elephantiasis of the right foot. She had been three weeks in the Hospital preparatory to the operation. She never rallied well from the chloroform, and died of pyæmia on the fifth day. At the autopsy pus was found in several joints. *Case 27.*—St. Bartholomew's: Mr. Lawrence.—A brewer, aged 45, admitted intoxicated, with a bad compound fracture of the leg. Primary amputation. Death on the third day. *Case 28.*—St. Bartholomew's: Mr. Wormald.—A man, aged 35, admitted on account of compound dislocation of the ankle-joint, with fracture. Reduction was effected, and an attempt made to save the limb; but erysipelas ensued, and amputation became necessary. It was performed, just below the knee, on the twelfth day. Secondary hæmorrhage occurred on the seventh day, and a ligature had to be placed on the anterior tibial artery. Under treatment. *Case 29.*—King's College: Mr. Fergusson.—A woman, aged 27, the subject of diseased tarsus. Repeated hæmorrhages made amputation necessary, she being at the time extremely reduced. No bleeding occurred after the operation, but she sunk exhausted on the fifth day. *Case 30.*—King's College: Mr. Fergusson.—A woman, aged 26, in fair health. Amputation on account of disease of the tarsus and ankle-joint of very long standing. Sinuses existed, and there was much thickening of bone. Pyæmia followed the operation, and death occurred on the 11th day.

Of the Foot.—*Case 31.*—King's College: Mr. Fergusson.—A woman, aged 40. Her amputation of the foot, on account of ulcer after sloughing of the toes. Recovery with a good stump. *Case 32.*—St. George's: Mr. Johnson.—A lad, aged 17, the subject of incipient phthisis. Amputation of the ankle-joint, on account of strumous caries of the bones of the foot. Doing well.

Of the Upper Extremity.—*Case 33.*—St. George's: Mr. Cutler.—A boy, aged 13, in good health. Amputation through the arm, on account of disease of the elbow and humerus, too extensive to permit of excision. Recovered. *Case 34.*—The Middlesex: Mr. Moore.—A man, aged 26. Amputation through the arm, on account of diseased elbow-joint following an injury. Recovered. *Case 35.*—Guy's: Mr. Cock.—A countryman, aged 69, in good health. Amputation through the forearm, on account of very extensive epithelial cancer on the back of the left hand. The bones had been exposed, but no glands were diseased. Recovered. *Case 36.*—St. Thomas's: Mr. Le Gros Clark.—A man, aged 30. Amputation through the forearm, on account of contracted hand after an injury from glass. Recovered. *Case 37.*—The London: Mr. Luke.—A boy, aged 15. Primary amputation through the forearm, in consequence of his hand having been crushed by a cog-wheel. Recovered. *Case 38.*—University College: Mr. Quain.—A boy, aged 17. Amputation through the forearm, on account of diseased carpus. Recovered. *Case 39.*—St. Thomas's: Mr. Simon.—

A man, aged 28. Primary amputation through the forearm, on account of crushed hand. Recovered. *Case 40.*—St. Bartholomew's: Mr. Lawrence.—A boy, aged 14, in good health. Primary amputation of one finger, on account of crush. Secondary amputation at the wrist-joint, on account of gangrene, three days after the accident. Recovery. *Case 41.*—St. Bartholomew's: Mr. Wormald.—A boy, aged 10. Primary amputation, just below the elbow, on account of an injury from machinery. Recovered. *Case 42.*—St. Thomas's: Mr. Solly.—A man, aged 41. Amputation of the forearm, on account of ankylosis of the fingers. Recovered. *Case 42.*—St. George's: Mr. Hawkins.—A man, aged 58, in good health. Amputation through the forearm, on account of diseased wrist. Recovered. *Case 44.*—St. George's: Mr. Cutler.—A strumous lad, aged 17. Amputation through the arm, on account of diseased elbow-joint. Recovered. *Case 45.*—St. Bartholomew's: Mr. Skey.—A boy, aged 14. Forearm torn off by machinery, and comminuted fracture of humerus. Primary amputation below the elbow-joint. The fracture united well, and the stump healed quickly. *Case 46.*—University College: Mr. Erichsen.—A man, aged 38. Amputation at the shoulder-joint, two days after an extensive injury to the part with dislocation, and in consequence of gangrene. Death forty-eight hours after the operation. *Case 47.*—University College: Mr. Quain.—A man, aged 49, the subject of phthisis. Amputation through the forearm, on account of diseased carpus of two years' duration. Rigors occurred a few days after the operation, and symptoms of pleuro-pneumonia of a low form. Death occurred on the twentieth day. At the autopsy, tubercular cavities were found in the apices of the lungs, and a large amount of fluid in the pleural sacs. *Case 48.*—St. Bartholomew's: Mr. Lawrence.—A cachectic man, aged 57. Amputation through the upper arm, on account of necrosis of the humerus, a spontaneous compound fracture having occurred. He remained under care some weeks, but as there was no attempt at union, and hæmorrhage occurred frequently, the limb was removed. He gradually sank, and died on the tenth day.

(To be continued.)

HOSPITAL NOTES.

PYÆMIA AFTER SOME OF THE OPERATIONS WHICH IT DOES NOT USUALLY FOLLOW.—About six weeks ago, in the theatre of University College Hospital, Mr. Erichsen removed the breast of a woman, of rather middle age. She had come up from the country, and was remarkably robust looking, though rather too stout for perfect health. The disease, believed to have been malignant, proved to be of cystic character. As regards the operation, all was as well as could be wished; there was very little bleeding indeed. Within a day or two of the operation, however, slight rigors ushered in an attack of erysipelas, and not long after the symptoms of pyæmia supervened. The wound became glazed, and destitute of healthy granulations. Pains and great tenderness were complained of in several of the joints; the left eye inflamed, and was lost from suppuration in the layers of the cornea, and ulceration of the skin over the other breast took place. She sank into a condition from which recovery seemed almost hopeless; but, under the free use of stimulants, improvement took place, and it is now hoped that she may do well. Two months ago a case, in which Mr. Lawrence, in St. Bartholomew's, had performed lithotomy in a delicate lad, ended fatally from most well-marked pyæmia, the symptoms of which had supervened after more than two weeks of most satisfactory progress. Mr. Simon in St. Thomas's has also had a case in which symptoms of pyæmia followed lithotomy, and which has ended fatally. In a case in King's College Hospital, it followed the excision of piles, and the operation for fistula in ano; and in a second, in the same Hospital, the division of a stricture of the rectum. A man, aged 57, was admitted under Mr. Fergusson, in bad health, and suffered from old piles and fistula. The piles did not bleed, but he had passed blood in his urine. The usual operation for the fistula was performed, and at the same time the hæmorrhoids were snipped off. Death, with all the symptoms of pyæmia, followed twenty-five days afterwards. Large secondary abscesses were found in the loins. A woman, aged 36, in bad health, came under Mr. Fergusson's care on account of non-malignant stricture of the rectum, of six years' duration. It was two inches up the bowel, and very tight. Mr. Fergusson divided it with a bistoury. Rigors followed,

and death took place fifteen days afterwards. We may instance the above as examples of pyæmia following operations which are generally exempt from it; and they ought to be borne in mind in all statements made to patients, as to the risk incident to any contemplated operation.

TRIALS OF THE NEW ESCHAROTICS.—Mr. Curling is making trial of the diluted solution of chloride of zinc in the case of large fungating cancer of the inguinal glands, which we noticed a few weeks ago. (See page 593, Dec. 19, 1856.) The same strength is employed as produced such a happy result in Mr. Stanley's case of cancer of the breast. Mr. Stanley is also trying the same in a case of deep ulcerated cancer of the inguinal glands, secondary to soot cancer of the scrotum. On Wednesday week Mr. Erichsen, in University College Hospital, used the sulphate of zinc to a cancer of the labium, as recommended by Professor Simpson, of Edinburgh. Mr. Marshall, in University College Hospital, has been employing a concentrated solution of chromic acid as a caustic in cases of gonorrhœal warts. It appears to be very effectual, one or two applications usually getting rid of the warts, and with less pain than most other strong caustics. It is applied with a glass brush, and the part afterwards covered with lint. It has the advantage of not staining the linen. At St. Thomas's for some time past, at the suggestion of Mr. Rainey, creosote has been employed for the same object. One of Mr. Marshall's successful cases was, however, one in which creosote had failed.

CASE IN WHICH PERINEAL SECTION WAS PERFORMED FOUR YEARS AGO—RELAPSE OF THE STRICTURE, AND PROPOSED SECOND OPERATION.—It is very difficult to obtain the history of cases in which perineal section has been performed for sufficiently long periods afterwards to test the permanency of the advantages obtained. There is now a man in University College Hospital for whom that operation was done four years ago, and we may we think profitably ask our readers' attention to some features of interest which his case presents. The man, who is now aged 50, and had suffered for twenty years from a most troublesome stricture. Early in 1853 he came under Mr. Thompson's care in the Marylebone Infirmary, and had his stricture divided from the perineum. A very small incision was made, and the wound closed very quickly. He left the hospital, the urethra receiving easily No. 11, and all being quite sound. Now prior to this operation he was in worn-down health, unable to follow any occupation, and had been repeatedly under hospital care, having had numerous urinary abscesses in the scrotum and perineum, which had required opening. Treatment by dilatation had been fairly tried, and failed to give permanent benefit. After the operation he returned to the country, and in employment as a huntsman rode regularly with his master's hounds for nearly two years. Until nearly the end of this period he never had any serious trouble with his stricture, and never once employed bougies. At length, however, he suffered several short attacks of retention, and the urinary irritation, &c., increasing, was compelled to give up his employment and come to London. Since then (two years) he has been under Mr. Thompson's treatment by dilatation, and by means of the fortnightly use of instruments has been kept tolerably comfortable. The stricture, however, recontracts as soon as the treatment is interrupted, and it is now intended to perform a second and more free section of it from the perineum. Now we have here a case to which certain opponents of the perineal section will point with triumph as an example of failure. To do so, however, is most unfair. It is true the cure has not been permanent, but the operation did, nevertheless, confer upon the man most signal benefit. For two years he was in good health, and, despite the relapse, has never been reduced to nearly so bad a state as he was prior to its performance—for instance, has never had a urinary abscess form. The amount of relief obtained, and its duration, ought indeed to be considered most satisfactory. Freely admitting that the early advocates of perineal section stated too much when they asserted that strictures so treated were not liable to return, we must yet insist that, short of conferring absolute and permanent immunity from recurrence, it may be a most invaluable means of treatment.

EXPECTED OPERATIONS.—On Saturday (this day), at St. Bartholomew's, Mr. Lawrence has a case of excision of a scirrhus breast.—At King's College, Mr. Fergusson has a case in which a contracted cicatrix after burn is to be liberated by operation.—And Mr. Bowman has two cases of removal of necrosed bone.

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Medical Times & Gazette.

SATURDAY, JANUARY 31.

THE POOR-LAW MEDICAL SERVICE.

WE have received the continuation of Mr. Griffin's pamphlet, addressed to Lord Palmerston, the former portion of which we have already noticed. The additional statements and suggestions now presented to the Prime Minister and to the public are worthy of the most serious attention. Mr. Griffin details with great truth and simplicity the annoyances to which Union Medical officers are subjected by the local Boards, and he also exposes the circumlocution, evasiveness, and delay of the Poor-law Board at Whitehall. Undaunted either by local opposition or the impassiveness of the central authority, Mr. Griffin continues with unwearied perseverance to circulate the details of Poor-law Medical grievances among the members of the profession, the two Houses of Parliament, and the public in general; having hitherto in vain memorialized the Poor-law Board upon the subject. It would be amusing, were it not in many respects painful, to contrast the manly, straightforward appeals of an ill-used Union Surgeon, with the curt, cold, and cautious replies of the authorities at Whitehall. On the one hand we might picture to ourselves an educated gentleman in a rural district, exposed to all weathers and to all diseases, insulted and ill-paid by the local Board, struggling to maintain a wife and children in decent respectability, and fondly clinging to the hope that, however badly he may be treated in his own district, there is a tribunal in the metropolis which has the power of throwing the shield of protection over him, so long as his conduct is honourable and his motives pure; on the other hand, we can imagine the officials of the Poor-law Board, enjoying good salaries and supplied with every comfort, receiving the communication of the unfortunate Poor-law Surgeon with cool indifference, and after acknowledging its receipt and promising that it shall receive "attention," throwing it into the fire or into the waste-paper basket, or what is worse, actually encouraging the local Guardians in their tyrannical and mean proceedings. The fact is that the officials at Whitehall would willingly get rid of the whole question of the Poor-law Surgeons, if they could do so with safety; but since the recent agitation on the subject they are afraid of the Press and of the House of Commons, and are therefore compelled to listen to such communications as those made by Mr. Griffin, although with ill-concealed reluctance.

As it is useless to expect any redress of grievances on the part of the Poor-law Board, and as it is more than probable that the whole question of Poor-law Medical relief will receive full attention in the ensuing session of Parliament, we think the occasion suitable for offering some remarks upon several points touched upon in Mr. Griffin's pamphlet, of paramount importance to the Medical Profession, to the sick poor, and to the whole community.

In the first place, we may mention as one of the most important suggestions of the Associated Poor-law Medical Officers, and one which has been already promulgated in Mr. Rumsey's "Essays on State Medicine," the necessity of placing a Medical Practitioner, conversant with Union affairs, upon the Poor-law Board. This would be a point gained, if our own proposal, to make the Board a Medical Board assisted by a Lawyer, should be found impracticable, as it must be in the present state of the House of Commons. In all the discussions that have taken place between Union Surgeons and the Central Board, the former are uniformly placed in a position of obvious disadvantage; for the officials at Whitehall, consisting of political placemen and lawyers, have no sympathy with Medical men, and have no knowledge of Medical affairs. They are, consequently, utterly unable to judge fairly in matters relating to Medical and Surgical practice. What would be thought, for instance, of referring a legal question to the decision of a Board of Physicians and Surgeons? or a theological one to the judgment of a Court-Martial composed of admirals and generals? or a military one to the Ecclesiastical Court? and yet, preposterous as these propositions may appear, they are certainly not more extravagant than the present practice of referring matters that are strictly Medical to the Poor-law Board as now constituted. In the name of common sense and justice, then, we do demand that, when we find Medical men daily driven from their posts by the tyranny and injustice of local Boards, there should be some tribunal where our injured brethren may seek for redress. Under present circumstances the Union Surgeon who is ill-treated, abused, or dismissed, has not even the chance of a trial, but he is cast forth remorselessly if he offend the prejudices of the local Board, and without the slightest probability that his case will even receive a hearing from those whose express duty it is to judge between the injured party and the oppressors. The introduction of a Medical element into the Poor-law Board would be attended with great advantage to the Board itself, which is at present manifestly incapable of dealing with Medical questions; while it would afford some guarantee to the members of our Profession engaged in Poor-law practice that there really existed a court of appeal, to which resort might be made in cases of dispute between the Medical officers and the local Boards.

In the next place, the Associated Poor-law Medical officers represent the necessity of making Poor-law Medical appointments really permanent, except in cases of misconduct or legal disability. At present, although the Poor-law Board has taken some steps in the right direction, the appointments are by no means uniformly permanent, numerous technical and local circumstances enabling the District Boards to dismiss their Medical officers in the most arbitrary manner; while in the case of a great number of parishes, which are not yet strictly included in the regulations of the Poor-law Board, the control of the Medical officers is left wholly, and without any appeal, in the hands of the local authorities. It is, therefore, very fairly demanded that the Poor-law Medical officers should be allowed to retain their appointments as long as they perform their duties to the sick poor under their charge, without the liability of dismissal at the caprice of parochial cliques, who frequently vent their petty malice most strongly against gentlemen who are the most distinguished for their high character, humanity, and skill.

Another most important suggestion put forward in Mr. Griffin's pamphlet, and previously sketched out in Mr. Rumsey's Essays, is the consolidation of the functions of Medical officers of Health with those of the Poor-law Surgeons throughout the country. That any such combination could, under present circumstances, be effected, we are not so san-

guine as to imagine; because, under the existing system of dismissing Poor-law Medical officers at the will and pleasure of local Boards, not to mention the corrupt influences which too often sway such assemblies, it would be quite impossible to secure the services of an efficient body of Medical men sufficiently well qualified to master the principles and the details of sanitary science, and at the same time sufficiently independent to propose and to carry out beneficial hygienic reforms. In addition to these difficulties, the wretched remuneration offered for Poor-law services, and the infamous system of putting up the appointments to the lowest bidder, would always exclude the best class of Medical men from such a discreditable competition, and would leave the field open to young practitioners, full, indeed, of zeal and energy, but unable to exercise any moral weight in their respective districts.

But under a more healthy system of Poor-law Medical administration, or by the transference of the Medical functions of the Poor-law Board to the Board of Health, provided this Board were properly constituted, the Poor-law Medical service might be raised to a position of the very highest importance, analogous to that occupied by the Medical service of the Army and Navy. The appointments, accompanied by a due remuneration, might be thrown open to competition among the most distinguished cultivators of the science and the practice of our Profession; and different grades might be instituted in the service, dependent upon Professional position or superior Medical attainments. While these appointments might still rest primarily with local Boards, we must express our decided opinion that a controlling power should exist in the State to fix the remuneration of the Medical officers, and to protect them in the legitimate discharge of their duties; and we may add, that the State should define in some degree the nature of the qualifications such Medical officers ought to possess.

Under such an arrangement the Poor-law Medical officers would form an integral part of the institutions of the country; they would be the friends and benefactors of the sick poor; they would be the consultants to assist, in case of necessity, the junior Poor-law officers; and they would be the advisers of the local Boards and of the Government in all matters relating to the sanitary condition of the population.

These and other matters of equal importance will be discussed, as we believe, in the ensuing session of Parliament, and Mr. Griffin's labours may at last be rewarded by the emancipation of the Poor-law Surgeons from their present thralldom. But, again and again, we exhort the members of our Profession to be true to themselves, as they may be assured that their own weakness is the only real strength of their adversaries. Among the ranks of our Professional brethren are many who possess zeal, energy, and self-devotion in the highest degree; but union, which is the source of strength, has hitherto been lamentably deficient. The enemy, on the contrary, consists of a compact body, composed, in too many cases, of illiterate and vulgar-minded persons, whose sole object is to save the parish rates, regardless of the welfare of the sick poor or the dignity of Medicine; and these arrogant officials are secretly, and sometimes openly, backed and encouraged by the Poor-law Board, which, like other similar well-paid Government bodies, is anxious to save itself trouble, and willing to leave the Medical officers of Unions to fight their own battles, unless it is driven to interfere by the loudly expressed voice of public opinion.

THE WEEK.

The last Report of the Registrar-General contains some interesting information as to the rate of mortality among persons of different professions and occupations. The mortality in

1856 of persons of 20 years of age and upwards, in proportion to the numbers living of each class, was as follows:—

Persons engaged in the general or local government of the country, 2.04 per cent.; persons engaged in the defence of the country, 4.2 per cent.; persons in the learned professions, with their subordinates, 1.9 per cent.; persons engaged in literature, fine arts, and science, 1.8 per cent.; persons returned only as children or relatives, 1.26 per cent.; persons engaged in entertaining, clothing, and performing personal offices for man, 1.9 per cent.; persons who buy or sell, keep, let, or lend money, houses, or goods of various kinds, 2.1 per cent.; persons engaged in the conveyance of men, animals, goods, and messages, 2.6 per cent.; persons possessing or working the land, and engaged in growing grain, fruits, grasses, animals, and other products, 2.4 per cent.; persons engaged about animals, 1.6 per cent.; persons engaged in art and mechanic productions, 2.2 per cent.; persons working and dealing in animal substances, 1.9 per cent.; persons working and dealing in vegetable substances, 1.9 per cent.; persons working and dealing in minerals, 2.19 per cent.; labourers and others, branch of labour undefined, 2.18 per cent.; persons of rank or property not returned under any office or occupation, 7.4 per cent.; persons supported by the community, and of no specified occupation, 2.05 per cent.

Here the chief point of remark is, the apparent high rate of mortality among those engaged in the defence of the country, viz., 4.2 per cent; but this result is due to Greenwich pensioners being included in this class, among whom the rate of mortality was 8.5 per cent. The large percentage also of deaths among persons of rank or property must be considered in conjunction with the fact that this class includes many persons advanced in years who have retired from other occupations when near the limit of human existence. The deaths in the Medical Profession in 1856 were—among Physicians, 14, or 2.5 per cent.; Surgeons, 57, or 1.09 per cent.; and Medical Students, 11, or 1.6 per cent.

We published last week the questions given at the written examination for Assistant Surgeoncies in the East India Company's service. The names of the successful candidates will be found in another column. Twenty-two vacancies were declared. Forty-six candidates presented themselves. Each candidate was under examination for seventeen hours; namely, twelve hours for the written examination, one for the oral, and three for the investigation of surgical and medical cases and for the performance of operations. We feel assured that these examinations are admirably conducted; indeed, any one who will look over the questions as published last week will see that they are exceedingly well adapted to test both the absolute and comparative fitness of the candidates for the post to which they aspired. The questions were such as any diligent student of fair ability ought to be able to answer, while ample scope was afforded to the man of ability to show his superiority.

Last week's number of the *Dublin Medical Press* contains one of the strangest and most unfounded charges ever made. We are at a loss to comprehend whether it has occurred through some most egregious blunder, or under circumstances much more inexcusable; but as it concerns the character of one of our first London Surgeons, it becomes a duty to expose it. Dr. Jacob writes a long article, with the object of showing that in 1827, he wrote an article on a "peculiar ulcer of the face," and that the subsequent describers of the "Rodent Ulcer" had omitted to allude to his writings. So far so good; but he next goes on to insinuate against Mr. Paget the charge of having neglected all reference to preceding authors upon the subject, and of having seemed to wish to appropriate their labours to himself. Quoting at length Mr. Paget's description of the affection, Dr. Jacob omits, from the middle

of that description, a quotation from Sir Benjamin Brodie, which occupies half a page of Mr. Paget's book, and then asserts that Sir Benjamin is passed over wholly unnoticed! But yet more strange, Dr. Jacob accuses Mr. Paget of having neglected to make any allusion to the excellent paper on the subject by Mr. Caesar Hawkins, whereas on the very page of Mr. Paget's book from which Dr. Jacob quotes, and to the number of which he carefully refers, is the following note:—"The whole of this subject is admirably illustrated by Mr. Caesar Hawkins, in papers in the *Medico-Chirurgical Transactions*, vols. xix. and xxi., and in the *Medical Gazette*, vols. xxviii. and xxix. Indeed, I can add nothing to his account, except such conclusions as are derived from microscopic examinations of the diseases." Mr. Paget's description of the disease is but short, occupying about three pages, yet in it no fewer than four names—those of Brodie, Hawkins, Lebert, and Hutchinson—are mentioned as original observers respecting it. It is true that Dr. Jacob's name is not found, but had Dr. Jacob felt himself aggrieved by being passed over, he ought, as a Physician and a gentleman, to have confined his charge within the limits of truth, and not have attempted to support a fictitious attack by misstatements which, at first sight, certainly appear to be wilful, but which we trust, for the honour of the Profession, Dr. Jacob may be able to explain.

A quack has recently been caught in his own trap after a rather amusing style. Dr. Sidney Hall, *alias* Dr. John Sutton, M.R.C.S., *alias* Dr. Manning, tried to extort money by publishing a libel against Mr. William Harman, a farmer at Stamford. Police-constable Tompkins (315) called on Dr. Hall for a little advice, but not finding him in the way, took an interesting survey of the house, being aware, after a stray stare at the balustrades, of the close proximity of his bird. After a long search, and when almost in despair, Mr. Tompkins betook to the operation of percussing the drawing-room floor, and finding the physical signs of a large cavity, he at once proceeded to discover its contents. Beneath the carpet was a trap-door, beneath the door the cavity so accurately diagnosed, and in the cavity a dark, morbid growth distinctly organized, which turned out to be, without microscopic inquiry, the *alias* Doctor. The sides of the cavity were padded; it was constructed, said the occupant, because he was a shareholder in the Royal British Bank, and being afraid of the bailiffs sought concealment. Dragged by the ruthless anatomist Tompkins from his cell, this retiring quack was exhibited at the Clerkenwell police-court on Saturday last; but the case being unusually interesting, it was remanded.

The cheap daily press, as represented by the "MORNING STAR," has taken up with great energy and ability the defence of the Poor-law Medical officers. In a leader on Tuesday last the STAR gives a strong appeal in favour of Mr. Griffin's views. It urges the unity of the profession on the subject, the necessity for a general protest, the apathy of the Poor-law Board in the carrying out of the powers with which it is invested, and the incompetence and niggardliness of Boards of so-called Guardians. If the public at large could, through the medium of the general press, be brought to a true knowledge of the present system, the grievances are too marked to escape redress. Since our leading Article was written we have received from Mr. Griffin the copy of a Circular which he intends to address to all the Poor-law Medical officers throughout the kingdom. He announces that a General Meeting of Poor-law Medical officers will shortly be convened, of which meeting due notice will be given in the Journals; and that 1500 members are now enrolled on the books of the Poor-law Medical Association.

As funds will be necessary to carry on the struggle, he appeals for contributions from the Profession throughout the country; and we have no doubt that this appeal, which will be in all probability a final one, will meet with a ready and liberal response.

It may be known to many of our readers, that Dr. Fell, an American Physician, has been employing a secret remedy in the treatment of cancer for some months past in London, and has acquired a very considerable reputation. It should be also known that Dr. Fell has invited the attention of the Profession to his treatment, and has opened his house every Tuesday to any Practitioner who wished to observe the results of his caustics. A great many of the leading Surgeons of the Metropolis, though unwilling to countenance the use of a secret remedy, have thought it their duty to see what really could be done by Dr. Fell. Another step has just been taken in the matter. It seems that there is at the Middlesex Hospital a large cancer endowment; one of the provisions of which is that every means should be taken to test fairly any remedy which is not preserved as a secret one. When the Board heard, through some of its members many months ago, that Dr. Fell was using a remedy which had done good in some instances, they wrote and invited him to make a trial at the Hospital. Dr. Fell has come forward and has offered to apply his remedies on a given number of cases, and for a given time; divulging to the Surgeons of the Hospital the nature of his remedies, under promise that they will not use them, nor make them known before the expiration of six months; and that when the trial has been made for the stipulated time, they will report on the cases which have been treated; the treatment to be carried on under the observation of the Surgeons. Dr. Fell also promised himself to publish the nature of his treatment in a short time. The proposal was at once accepted. Dr. Fell has been using his remedies under the observation of the Surgeons of the Middlesex Hospital for more than a week, and has explained their nature and mode of preparation; and these gentlemen report, that so far as they can judge, he has acted in perfect good faith and candour, without any reservation. The results will be made known in due time. Meanwhile we think these facts should be made public; and, as so much has been said about Dr. Fell's treatment, it should be known that it is being fairly tested under competent supervision.

The Medical Officers of the Army have so many just causes of complaint, and so many just claims upon the consideration of Government and the gratitude of the nation, that we are extremely glad to be able to announce that a Royal Commission is about to inquire into the condition of the whole department. The names of the members of this Commission are pretty well known, but Mr. Sidney Herbert and Dr. Andrew Smith are the only two gentlemen whose appointments are considered as definitively arranged. We sincerely trust that this inquiry will be complete, and we feel convinced that the result must prove advantageous to the department, the service, and the public.

We rejoice to learn that there is no foundation for a report which has been circulated to the effect that the London Missionary Society, which sent out Dr. Livingston, had "taken umbrage" at the honours bestowed on him by the Geographical Society and other learned bodies. On the contrary, the Society has given very substantial proof of a different feeling, by heading the Livingston Testimonial with a contribution of £100.

OUR GREAT ONES OF THE PAST.

MEN OF THE BRITISH SCHOOL.—No. V.

RICHARD MEAD, M.D., F.R.S.

IN the year 1662, there lived in the village of Stepney one Mathew Mead, a distinguished Nonconformist divine. He was a man of simple and earnest life and manner, and was one of that band of two thousand Presbyterian ministers, the members of which, sacrificed to the perjury, the weakness, and the thoughtless cruelty of Charles the Second, and to the unconstitutional oppressions of his determined brother, the Duke of York, chose rather to give up their livings and homes, and become outcasts of the world, than do violence to conscience, or be guilty of subservience to royal iniquity.

The majority of these Nonconformists, brought thus to the touchstone of their faith, were reduced by the "Act of Uniformity," (passed in 1661,) to actual beggary. But Mathew Mead had, by good fortune, an ample income independently. The loss of his benefice was thus of small consideration, and he therefore continued not only to reside at Stepney, but, in the face of the canonical man who had usurped his place, to keep up his ministrations amongst his numerous flock. A stout heart had Mathew Mead, an untiring zeal, a generous soul. Terrible scenes of revenge, deaths by execution, and every conceivable horror in the name of cruelty were at this time being perpetrated, sufficient, forsooth, to frighten every honest man out of his honesty. It was a period of a grand reaction, from an overstrained and unnatural attempt at supreme saintship, to one of moral anarchy, and a maniacal dominion of vice.

But our friend, Mathew Mead, bore up against these national calamities. The cross and the glory to him were one; so, in contempt of all, he held on—spoke peace and virtue to his believing friends, declared the simplicity of true faith, stripped the idle ceremonialist of his tinsels, taught the grown man to worship the pure Deity with the faith of a young child; and by his own purity of life showed, in living example, the truth of the Latin proverb, "Ille honorat Deum optime qui facit mentem suam similem Deo quantum fieri potest."

In these sentences we introduce to the reader the father of the distinguished man whose life-history is now before us, Dr. Richard Mead. It is fortunate, in an historical point of view, that on this occasion we have in our possession a choice collection of biographical facts regarding our present great man. One work is of immense worth, because what it gives may be fully relied on. It happened that soon after the death of Dr. Mead, one of the writers (name unknown) of the *Journal Britannique*, collected from the friends of the deceased many particulars, and therewith put together an authentic history, which was afterwards printed in English as a separate treatise. We refer to this book specially, because, as it is our intention to make it a basis of reference as regards dates and life-facts, we would state as much at once, that the sin of



stealing literary stock may not be justly brought against us.

In addition, we have the works of Mead and some other historical documents, which we shall analyze independently, according to our custom. Let us turn for a moment to life-facts, by way of introduction.

Richard Mead was the eleventh child of his family. He was born at Stepney on August 11, 1673, the thirteenth year of Charles the Second. It was the proud desire of the excellent Mathew to give his children a good education, and in the fulfilment of this desire his large fortune was freely expended. He had in his house one Mr. John Nesbitt, afterwards an Independent minister. Under this tuition, continues our *Britannique* biographer, Richard remained until his tenth year. But now the reverses incident to

individual independence, when the unscrupulous are in power, broke up the domestic happiness of the Mead family. In the latter part of the year 1682, the king, guided mainly by his brother, the Duke of York, began to contemplate the exercise of an unlimited power over the corporations of large towns. In 1683 he commenced his usurpation tricks on the Corporation of London, which he at length brought into miserable obedience. This done, other towns followed in the wake, and money was extorted for the royal purse from a host of corporations to secure charters which gave to them no essence of liberty. The English nation, which, not many years before, had rebelled against the First Charles for tyranny of a milder cast, bore these impositions with moderation. The terrors of the last revolution fresh in their minds, they sought peace at any price; and preferred rather to wear for a time the badge of serfdom than buckle on again the Ironside sword. Dead, too, was the chief of the Ironsides; and with that death the last link was broken which held together the friends of right as well as might. So men went their ways, as we have seen men in our time, though, happily, not in our country, submitting and submitting, because the memoirs of bloodshed among brothers were fresh in their minds, and because, in a division of political parties, there was a common weakness on which despotism could for a season rest itself, and sit commandingly insecure.

But, although the nation at large submitted thus quietly to the reckless Stuart, the year 1683 was not without some shadow of insurrection, and the usual exhibitions of exemplary cruelty. Monmouth, Algernon Sidney, Shaftesbury, Armstrong, Howard, and Russell joined hands in rebellion, though with purposes widely different. The most unworthy of these took part in the Rye-House Plot, and the life of the king was saved, as it might be said, by a miracle, if it were not pretty clear in this, as in most similar instances, that the miracle agreed with its antecedent, the discovery of the plot,

in gender, number, and case. The plot detected, arrests and flights were thick as hail. The story we need not tell in detail. How brave Russell, whose soul was clear even of the thought of assassination, was fetched from his house to the Tower; to the bar, in the presence of the ruffian Jeffries; to the block in Lincoln's Inn, in the presence of his weeping countrymen;—how Sidney met the same fate. Sufficient it is for us, in briefly recalling attention to these events, to say that Mathew Mead was suspected of having a connexion with the conspirators. Whether the suspicion was true or false is not forthcoming, but it is certain that he thought it his most prudent course to leave his dear country, and, following the instincts of Shaftesbury, to get across to Holland without delay.

The father a voluntary exile, and the family ties for a moment broken, Richard Mead was sent from home, and placed under the tutorship of Mr. Thomas Singleton, another Independent who had suffered from the "Act of Uniformity," by being made to resign for conscience' sake the position of second master of Eton School. Under Mr. Singleton's supervision Richard Mead progressed famously. He was a boy of immense natural powers; his memory was tenacious, his mind buoyant, his love universal, his industry unceasing. He acquired languages with facility, and versified eloquently. He remained with Mr. Singleton six years, and then went to Utrecht, "to complete," says our authority, "his humanities."

At this time, 1689, there lived at Utrecht a man considered by his compeers as one of the most distinguished professors of history and eloquence of that period. This was Grævius, a man who in early life had been Professor of History at Deventer, but who was afterwards elected to the same chair in the University of Utrecht, and held it for well nigh half a century. Grævius died in 1703, leaving behind his famous treatise on the antiquities and history of Italy, Naples, Sicily, Sardinia, Corsica, and the adjoining islands.

Under this teacher, then, Richard Mead commenced his academic career. He carried to the Professor a letter of introduction from his eldest brother, Samuel Mead, speaking greatly in favour of Richard, who was described as a modest youth, already advanced in a knowledge of polite letters.

At the University of Utrecht our scholar remained three years, when, having made up his mind to study and practise medicine, he went to Leyden, where he studied botany under Herman, and the theory and practice of medicine under Archibald Pitcairn. Archibald Pitcairn the Scotchman, a Leyden Professor asks the reader. Yes, it is true. Pitcairn was an Edinburgh man, but in the year 1692 he was invited to Leyden, to take the chair of Medicine. He held it little more than a year, and then returned to the modern Athens; but during the time he enjoyed the honour of the Professorship, he had the further honour of receiving as students two of the brightest ornaments of the Medical world—Mead and Boerhaave. It may be easily understood that these students, with tastes so similar and intellects so refined, were not slow in becoming friends. Their hands were soon exchanged in the firm grasp of true fellowship, and the affection that sprang up between them—for it was real affection—extended throughout their lives.

Our Britannique historian tells us that Pitcairn in his manner was cold, and that to few educated under him did he transfer much cordiality. Mead, however, was a remarkable exception; for Richard, always retiring and at the same time fascinating, worked himself so far into the good graces of the stiff professor, that the latter not only became communicative, but received from the young student several observations which he afterwards embodied in his writings with all fair acknowledgment. His studies finished, Richard was joined by his eldest brother, Samuel Mead, by a Mr. Pollbill and Dr. Thomas Pollet, afterwards President of the Royal College of Physicians (we are following our Britannique friend literally), and the four commenced their travels. They went to Italy first, where, continues the biographer, Mead met with everything that could gratify his exact and refined taste for all that is great and beautiful. At Florence he had the curiosity to inquire for the *Tabula Isiaca*; but not being able to get any information about it, he desired leave to search for it in a lumber-room over the gallery. There he found this valuable piece of antiquity, buried in dust and rubbish, where it had been carelessly thrown, and during many years given up for lost.

In this year, 1695, on August 16th, Mr. Richard was trans-

formed into Dr. Mead, he taking at the University of Padua his degree of Doctor of Philosophy and Physic. Spending some time after this in Naples, he went later to Rome, remained there a brief period, and, finally returning to his birthplace, settled down in practice in the house in which he was born, about the middle of the year 1696. From what we can gather, it would seem that he continued to practise in Stepney with great success until 1703, when, on being appointed physician to St. Thomas's Hospital, on May 5th of that year he removed to town, and took a house in Crutchedfriars.

Prior to this he had gained a distinguished reputation, and many interesting events had occurred. In July 1699 he married Ruth Marsh, the daughter of a London merchant. In the same year, on October 16th, brave Mathew Mead, the father, who had returned from his exile and renewed his ministerial labours among the Nonconformists, died.

In 1702, Dr. Mead brought out his first literary work, entitled "A Mechanical Account of Poisons," and shortly afterwards he prepared for the Royal Society an analysis of Dr. Bonomo's discoveries on the cutaneous worms which generate itch. This analysis led to his election as a Fellow of the Society, and gained for him the friendship of the greatest President that ever held office there, Isaac Newton. That the historical link may not be broken, we shall turn now to the two literary productions here referred to, and see of what stuff they are made.

The work called the "Mechanical Account of Poisons" was published as a distinct treatise, but its author had already his admirers, one of whom, Mr. Samuel Morland, presented an analysis of it to the Royal Society, which analysis is printed in the twenty-third volume of the Transactions. The work itself consists of four essays. The first essay refers to the viper and its poison, and in it Mead settled for good a very important point, viz., that the viper emits a veritable poison with its bite. On this subject a warm contest had for some time been carried on. There was one Rhedi, who believed in a veritable poison; and another, Charas, who espoused a notion held by Van Helmont, that the effects of the bite arose from the "enraged spirits of the animal, and the yellow liquor was a pure and innocent saliva." Mead supported Rhedi. The experiments conducted by him in this inquiry were simple, but bold and effective. He made vipers, when enraged, bite hard substances; he collected the fluid emitted, he inoculated other animals with the fluid, and thus produced the specific symptoms. The viper, he says, conveys its mischief by the yellow liquor which it emits into the wound through a slit near the extremity of the tooth.

At this time the microscope was in great repute among natural historians. It was a kind of novel instrument in those days, but as popular as it is now, or nearly so. Our experimenter, therefore, must needs examine viper poison with this admirable instrument. By this means he discovered the juice "to be full of little floating salts, which in a short time shot out themselves into crystals of an incredible tenuity and sharpness." On this discovery he based a peculiar theory as to the action of this poison on animals inoculated with it. As the blood contains little floating globules in immense numbers, he conjectured that the pointed salts present in the poison, upon being introduced into the blood, prick the globules, which being thus emptied of their contents adhere, and being attracted in a manner quite different to what they were before, the texture of the remaining blood is broken.

The hypothesis of Mead was tinged with the mechanical views of his time, and we may look on it as a mere curiosity. But the facts he laid bare in the inquiry were still more valuable than we have yet related; for he not only proved the existence of a poison, but he showed, by tasting the poison himself, that it was only poisonous when introduced by inoculation, thus proving the words of the poet:—

"Noxia serpentem est admisto sanguine pestis,
Morsu virus habent, et fatum dente minantur,
Pocula morte carent."—*Lucan, Phars. IX. 614.*

Mead's observations on the effects of the poison when tasted run thus: "We resolved to end our inquiries by tasting the venomous liquor. Accordingly, having diluted a quantity of it with a very little warm water, several of us ventured to put some of it upon the tip of our tongues. We all agreed that it tasted very sharp and fiery, as if the tongue had been struck through with something scalding or burning. This sensation went not off in one or two hours; and one gentleman, who would not

be satisfied without trying a large drop undiluted, found his tongue swelled with a little inflammation, and the soreness lasted two days. But neither his nor our boldness was attended with any ill consequence."

At the end of his book he engraved, from an antique statue, a representation of a child holding out by the neck, in graceful figure, an enraged serpent, with this device: "*Labor est Anguis superare.*" Dr. Areskine, the anatomist, added several anatomical drawings.

As a remedy for these poisonous bites, Mead refers to the actual cautery, the axungia viperina, and viper's flesh; he concludes the essay by an account of some other poisonous animals, as the spider (in which he claims to have discovered the instrument conveying the poison), the scolopendra, and the scorpion.

The next essay relates to the tarantula and the mad dog. The remedy for a person bitten by the tarantula is said to be music, upon hearing which the patient often rises up and dances till he sweats out the malady. The third essay, which includes the consideration of arsenic, corrosive sublimate, various poisonous plants, and opium, is vague in its conjectures to the last degree. The attempt is made to base every explanation on mechanical principles. Corrosive sublimate is made up of saline crystals and mercury. The globules of mercury sublime, and lodge themselves in the pores and interstices of the saline crystals. The crystals are so many sharp blades, made more irresistible by the weight of the mercurial globules. Hence, in the stomach, these weighted particles corrode the parts, and are no joke. He mentions one curious historical fact regarding arsenic, viz., that this substance in time of plague was sometimes worn at the pit of the stomach as an amulet. This custom, he conjectures, had its origin in a mistake. "Perhaps some of the Arabian physicians had commended Darsini worn in a bag for a preservative in plague time. This, in their language, signifies cinnamon: but the Latin translators, retaining the same word in their translations as was frequently done, one or other afterward not understanding its meaning, substituted in its place *de arsenico*, as if Darsini were all one with Zarnich."

The fourth essay is on venomous steams and damps, and is a very curious and interesting document. Here Mead describes his visit to the Grotto del Cane, and explains that the miasm there only rises to a certain height from the earth. But, again, he gets into mechanical argument, enters at great length into the mechanism of respiration, and rides his hobby till it has not a leg to stand upon.

Passing from the work on "Poisons," we come to the analysis of Dr. Bonomo's views, which Mead presented to the Royal Society in January or February, 1703. While he was on the continent, he had heard of Bonomo's interesting researches, and he was the first to announce them in this country.

Bonomo was the discoverer of the itch parasite, his first communication of this discovery being made in a letter to Signior Rhedi in 1687; it is an abstract of this letter which Mead laid before the Society. The discovery occurred in this wise:—Bonomo had frequently noticed that poor women, when their children were troubled with the itch, with the point of a pin pulled out of the scabby skin little bladders of water, and cracked them, like fleas, upon their nails; and that the scabby slaves in the Bagno at Leghorn often practised this "mutual kindness" upon one another; it, therefore, came into his mind to examine what these bladders might be. Having found an "itchy person," he pricked one of the pustules, and squeezing out the water, he took out "a small white globule." Observing this with the microscope, he found it to be "a very minute living creature, in shape resembling a tortoise, of whitish colour, a little dark upon the back, with some thin and long hairs, of nimble motion, with six feet, a sharp head, with two little horns at the end of the snout." This was the simple discovery. It gave, said its originator, very truly, a rational account of the disease, and showed that it arises neither from the melancholy humour of Galen, nor the corrosive acid of Sylvius, nor the particular ferment of Van Helmont, nor the irritating salts of the serum or lymph of the moderns, but no other cause than the continual biting of the animalcules in the skin, by means of which some portion of the serum oozing out, little watery bladders are made. Hence, too, the reason why the distemper is so very catching, and why it can only be cured by outward applications, such as ointments and washes.

In the same volume of the Philosophical Transactions there is also published part of a letter from Dr. Jos. Morland to Dr. Mead, on the subject of the secretions of the animal body. This letter is exceedingly able, and contains the rudiments of our modern views on the subject of secretion.

Mead, now fully installed in London, and Physician to St. Thomas's Hospital, was a rising man. About the year 1704 he was elected on the Council of the Royal Society, an honour which was again bestowed in 1707. The changes in political affairs had all been in favour of the son of a Nonconformist. In the year 1707 the University of Oxford conferred on him the degree of Doctor of Physic, by a diploma dated the 4th of December. He continued his labours, practical and scientific, with unabated activity, and secured to himself the friendship and esteem of a large circle of learned and estimable friends.

About this time his labours were directed to the consideration of the influence of the sun and moon on animal bodies, which labours he communicated to the scientific world in 1708, in a separate discourse, the leading facts of which we shall trace out in this place.

The discourse is, perhaps, the most ingenious of all Mead's papers. As a Medical document it may be of little value, comparatively speaking, but as a philosophical treatise it is at once original and far-seeing. There is no doubt but that he was spurred on to the undertaking of this work by the labours of his friend, Sir Isaac Newton. Not long before, Newton had brought forth some of his grand deductions regarding the tides of the sea. It was Mead's idea, and he made it the basis of his argument, that "as the sea is, so must be the air." Following out this argument in favour of aerial tides as dependent on the influence of the sun and the moon, he showed that "the motion upwards of the air will be strongest of all about the equinoxes. Thus, applying in full to the atmosphere what Sir Isaac Newton had demonstrated in reference to the sea, Mead carried out his calculations with care and precision, and came finally to the grand conclusion, not only that the tides of the air are much greater than those of the ocean, "*but that these motions must both be universal, and also return at certain intervals.*"

In modern times this wind movement matter has caused many a brisk gale of argument. Ideas regarding the causes of these movements have varied, but one fact is now admitted universally, that the aerial tides are, like everything else natural, governed by fixed laws, or, rather, by a fixed law, "law of storms," so technically called. Modern vanity yet further assumes that this recognition of uniformity and law is the discovery of to-day. We say emphatically, it is not so. The discovery belongs to the age of Newton, and it was made by our Esculapian friend. We do not in saying this support the details of Mead's aerial philosophy, but the principle as a whole which he laid down.

Passing from the general or purely philosophical part of his discourse, Mead enters on the more professional part of his subject. He connects in a loose manner epilepsy, vertigo, hysteria, palsy, hæmoptisis, and menstruation with lunar influences, and relates stories in which he has faith, but which we in these perverse days should send to the coast, for the bird tribe thereabout. "Kirckringius," says he, "knew a young gentlewoman, whose beauty depended upon the lunar force; inasmuch that at full-moon she was young and handsome, but in the decrease of the planet so wan and ill-favoured that she was ashamed to go abroad till the return of the new moon gave fulness to her face and attraction to her charms."

Mead believed in the crises of diseases of the epidemic class, and with his definition of a crisis no modern one need quarrel: "A crisis is no more than the expulsion of morbid matter out of the body, through some or other of the secretory organs." But when he gets absorbed in his connexions of this principle with lunar motion, the mist falls, and we are left in thick night. It is curious at the same time, in these wanderings of his, to trace out every here and there the origin of some popular idea which still holds place. Here is one example:—In many parts of England the poor, to this day, have a common notion that death takes place most frequently with the ebb of the tide. Whoever may practise medicine for a few months by the side of the Thames will soon become familiar with the question, "D'y'e think he'll go off by turn of tide?" By-and-by too the practitioner will become so accustomed to the old query, that he will connect it more or less with the fact as it really occurs. The coincidence is indeed

common, and the people have faith in it. With the true genius for observation, Dickens has got hold of this popular feeling, and makes Mr. Barkis go out with the receding current, and float into space with the waves into the great ocean. The man of science looks on this now as a fanciful hypothesis, but it once held such different place in human reverence, that our author, Dr. Mead, accepted it, and a Royal Society man, Paschal, took upon himself to explain it. We give these Paschal's hypotheses, as of historical value. Strange title for an argument, "Concerning the Motions of Diseases, and the Births, and Deaths of men at different times of the *Νυχθήμερον*!" (a) Dividing the *Νυχθήμερον* into four senaries of hours, Paschal made the first to consist of three hours before the southing of the moon, and three after; the second of the six hours following, and the third and fourth, of the remaining quarters of the natural day. He takes notice that none are born or die a natural death in the first and third senaries, which he calls first and second tides, but all either in the second or fourth senaries, which he calls first and second ebbs. In like manner he observes that in agues, the tumult of the fits lasts all the tiding times, and goes off in kindly sweats in the ebbs. From whence he very naturally concludes that motion, vigour, action and strength, appear most and do best in the tiding senaries; and that rest, relaxation, decay, and dissolution belong to the ebbing senaries.

In the "Transactions of the Royal Society" for 1708-9, there is a paper from Dr. Mead on three cases of Hydrophobia. There is nothing special in these cases, except that in one the patient could not tolerate the appearance of anything white; and that in the dissections of two of these patients the operating anatomists pricked their fingers, and suffered from the effects of a poisoned wound, but recovered, showing no specific signs of the disease. An important observation this, though accidentally made.

Mead's pathological views on Hydrophobia were as follows:—"It is the effect of a particular kind of an inflammation in the blood, accompanied with so great a tension and dryness of the nervous membranes, and such an elasticity and force of the fluid with which they are filled, that the most common representations are made to the mind with too great effect, and the usual impressions of objects upon the organs cannot be suffered; hence proceed the timorousness, unaccountable anxiety and inquietude, which are always the forerunners of the dread of liquids." The cause of deaths in such cases, as Mead thought, is an exhaustion, due to the violence of the actions and efforts of the sufferer. The barking symptom sometimes met with was observed by him, and was attributed to attempts to cough up mucus from the trachea. In one of his cases there was constant priapism, a symptom noticed by Cælius Aurelianus. In another of the cases the symptoms did not appear until three months after the bite, a fox that had been bitten by a dog being the animal that bit the man.

In 1711, Mead moved from his house in Crutched Friars to a house in Austin Friars, which had been previously tenanted by Dr. Howe, then deceased; and he was appointed to read the anatomical lectures at Surgeons' Hall, which office he filled with great success, and continued in it for seven years. He had also the favour of the distinguished Radcliffe, who assisted him in his career, and to whose great position he ultimately succeeded.

[To be continued.]

REVIEWS.

Animal Magnetism and Somnambulism, by the Somnambule, ADOLPHE DIDIER. Pp. 319. London, 1856.

ALL the diseases of the mind and body are to be cured by animal magnetism, especially when the nature of the diagnosis and the plans of treatment are revealed by a "lucid somnambulist," to which class Adolphe Didier no doubt belongs. Not only do nervous complaints give way before the magnetic passes, but organic maladies, hitherto deemed incurable, disappear before the magic influence of that all-powerful agent. A few extracts will show that animal magnetism, when assisted by a "lucid somnambulist," is equal to the cure of any malady.

"*Alienation of mind*.—This dreadful complaint may be cured by magnetism." "*Aneurism*, or disease of the heart. Diseases of the heart are mostly all mortal. Considering the

uncertainty attending the use of medicine, we are of opinion that magnetism should be tried, and that there is great chance of its succeeding." "*Toothache*.—This complaint can be very easily cured through magnetism." "*Fever*.—All kinds of fever may be cured by magnetism." Not only do the combined powers of animal magnetism and "lucid somnambulism" cure all known human diseases, but they cure affections which are not regarded as diseases at all. Thus the ladies will find among the "illnesses peculiar to women," that the cure of "the menses" is to be achieved by "friction, and magnetisation, at a distance, upon the groins, the uterus, and the knees;" and the therapeutic treatment of the "glands" consists in "magnetisation from head to foot, warm breathing, long-continued friction, magnetism during sleep, magnetized water, to be used both as drink and lotion."

These quotations must suffice as specimens to show the rubbish of which the book is composed.

Lectures on Materia Medica and Therapeutics, delivered in the College of Physicians and Surgeons of the University of the State of New York, by John B. Beck, M.D., late Professor of Materia Medica and Medical Jurisprudence. Prepared for the press by his friend, C. R. Gelman, M.D. Pp. 559. New York, 1856.

THESE lectures were collected after the death of the author by Dr. Gelman, who made little alteration in preparing them for publication, beyond the correction of some verbal inaccuracies and the introduction of a few novelties. The chapter on Anæsthetics, for example, is entirely new, as are likewise the remarks on Cod-liver oil, which does not appear to have attained, as yet, in the New World, the celebrity which it has acquired in the mother country. The book, thus prepared, has obtained such a degree of success as to call for the necessity of the new edition which is now before us. The system followed in these lectures is to arrange medicinal agents according to their action, or supposed action, upon the human economy, a plan which we cannot but believe to be open to many objections. The treatment of the subject by Dr. Beck is such as might be expected from that accomplished and much lamented physician; although in this country the work will hardly be regarded as on the level with the present state of pharmacological science. Some drugs are described which are indigenous to America, and are in repute as native remedies. The getting up of the volume is pretty good, but there are several typographical errors which might have been avoided.

A Supplement to the Pharmacopœia; being a concise but comprehensive Dispensatory, and Manual of Facts and Formulae, for the use of Practitioners in Medicine and Pharmacy. By THEOPHILUS REDWOOD, Ph.D. Third edition. Pp. 1161. London, 1857.

THIS voluminous work no longer passes by the name of Gray's Supplement, as the editor has omitted so much and added so much more that little of the original production now remains, except the general plan and the arrangement of the contents. The extensive nature of the subject matter may be estimated by the fact that in addition to a most numerous list of Formulæ, there are notices of about three hundred animals and three thousand plants which have some real or supposed properties in the treatment of disease. The Index alone occupies no less than one hundred and thirty pages. Mr. Redwood is entitled to great credit for the pains and labour he has bestowed upon this well-known book. His chemical and pharmaceutical attainments afford a very sufficient guarantee for the accuracy of the descriptions which it contains.

Hints on the Pathology, Diagnosis, Prevention, and Treatment of Thoracic Consumption. By J. C. HALL, M.D. Third Edition, enlarged. Pp. 148. London, 1856.

THE foundation of the present little volume was laid in a series of papers by Dr. J. C. Hall which appeared in this Journal some years ago. Since the publication of the first and second editions the work has been entirely re-written, and it now contains the results of clinical observation extended over a practice of twenty years. Among the points peculiarly deserving of attention we may notice the description and the illustrations of the microscopical appearances of the sputa in pulmonary consumption, points which have acquired great

importance since the researches of Schröder van der Kolk and Dr. Andrew Clark. Dr. Hall confirms the statement of the former observer as to the appearance of yellow elastic fibres in the sputa, and of its diagnostic importance in determining the stage of the disease. We may also refer to Dr. Hall's description of the *Grinders' Disease*, which carries off a large number of the Sheffield artisans. It appears to be a species of bronchitis induced by the inhalation of minute portions of metal. The illustrations represent the appearances exhibited by the sputa in various conditions and periods of phthisis; and in one of the plates is delineated a specimen of *sarcina*, which, we believe, Dr. Hall was the first to discover in the sputa. The observations on the treatment of pulmonary consumption, without containing much originality, are characterized by sound judgment and will be read with interest.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

CASE OF GENERAL EMPHYSEMA FOLLOWING THE RUPTURE OF A PULMONARY CAVITY.

By M. CRUVEILHIER.

A woman, aged 24, was admitted into La Charité in a state of very advanced phthisis, several *superficial* cavities existing at the upper part of the right lung. During an attack of cough she heard a hissing sound, which was followed by the production of a tumour in the subclavicular region. Next night the cough was still more violent, and the swelling extended to the face and trunk. The face, which had been so emaciated, was now found to be excessively distended with air, especially at the cheeks, while other very large swellings formed by it were observed at the subclavicular regions, over the deltoid muscles, and along the sides of the trunk. These swellings were tense, and resounded like a drum, and besides them there was much infiltration of air, as in ordinary emphysema. When examined by the fingers, these tumours presented only an elastic resistance, like bladders full of air; but the infiltrated parts gave rise to a crackling sound. To the ear the infiltrated parts also imparted a very manifest crepitation sound, like that heard in commencing pneumonia. No sound was heard over the collections of air, except those of the subclavicular region, which gave a distinct, unmixed vesicular *bruit*, even where but the day before amphoric resonance and gargouillement had been heard. In coughing, a sound was heard there exactly like the noisy issue of air from the anus. It was evident that one of the superficial cavities had become adherent to the parietes of the thorax, and that the intercostal space had become perforated.

The infiltration went on increasing until it occupied the entire head, trunk, and extremities. The aperture by which air escaped into the subclavicular tumour increased, and the patient's respiration was alarmingly embarrassed. Punctures having given only temporary ease, an incision was made into the subclavicular tumefaction, air issued with noise, the patient felt much relieved, and an active respiration was set up through the aperture. After this, the collections of air gradually dispersed, although that which was infiltrated continued to some extent; air, after a while, only issued through the cavity on coughing, and the patient's suffering was effectually mitigated. She died, however, 12 days after the appearance of the emphysema.

Upon this case, M. Cruveilhier makes some interesting observations. 1st. In regard to the *emphysema*. 1. There are two kinds of this, that by *infiltration*, and that by *collection*; the latter implying a great laxity of the cellular tissue, and the existence of a large perforation. 2. Auscultation is a much more delicate and precise mode of diagnosis than palpation, and will detect air when the touch cannot. 3. The vesicular respiration heard in the subclavicular tumour was due to this sac being not unilocular but multilocular, having communicating vesicles in connexion with the lung. 4. All emphysematous parts are painful, and the limits of the emphysema may be exactly judged of by those of the pain. 5. It is doubtful whether the presence of air in the cellular tissue ever gives rise to inflammation, it always, in the end, becoming absorbed. 6. In the case of emphysema produced by the rupture of a tubercular cavity, we should make, opposite to

the perforation, an incision sufficiently large to give issue to the whole of the expelled air, converting the broncho-cellular into a broncho-cutaneous fistula.

2nd. In respect to *superficial pulmonary cavities*; these are either adherent or non-adherent to the costal parietes. 1. When the cavity is non-adherent, its rupture leads to penetration of air into the cavity of the pleura, *i.e.* pneumo-thorax, and consequently to purulent pleurisy. The reason why purulent pleurisy constantly and rapidly ensues, while the presence of air in the cellular tissue gives rise to no inflammation, probably is, that at the same time more or less purulent mucus, pus, or tubercular matter gains access to the pleura. 2. In the more ordinary case, in which adhesion does take place, if the morbid process continues, all the textures from the pulmonary tissue to the ribs or cartilages are successively destroyed; and if adhesions have not become previously set up between the intercostal muscles, and the muscular and cellular layers which separate them from the skin, perforation follows, air is effused into the cellular tissue external to the thorax, an *external* pneumo-thorax taking place in the form of emphysema by infiltration or by collection, according to the diameter of the perforation. 3. In other cases the complete perforation of the intercostals only taking place in a slow and progressive manner, and adhesions being set up between their external surfaces and the adjacent cellular and muscular layers; these layers, becoming an integrant part of the cavity, constitute a soft and flaccid tumour, presenting alternations of size, and undergoing distension during coughing. This soft and flaccid tumour differs from emphysema, properly so called, as it contains air as well as pus, is in evident communication with the air passages, and is capable of reduction in size by external pressure. There is but one step from this tumour to the production of the cutaneous pulmonary fistula, or broncho-cutaneous cervical fistula, figured in M. Cruveilhier's *Anat. Path.*, liv. xxxii. pl. 5.—*Bulletins de la Société Anatomique*, 1856. Pp. 33-48.

CASE OF PARAPLEGIA, PRODUCED BY THE RUPTURE OF A PULMONARY CAVITY.

By M. CRUVEILHIER.

As a pendant to the foregoing case, M. Cruveilhier relates the following:—A woman, aged 57, was admitted into La Charité suffering from complete paralysis of the lower extremities, a horizontal line passing across the extremity of the scaphoid appendix of the sternum denoting the limits of the paraplegia. The affection had been gradually coming on during two years, and for the last three months the patient had not been able to leave her bed. She had had a severe cough for some time, and died of pneumonia about three weeks after her admission. At the autopsy, on the spinal canal being opened, there was found at the level of the fourth left rib an accidental production resembling a fungous vegetation, infiltrated with tuberculous matter, and adherent to the dura mater; pulpos tubercular matter also surrounding the fourth dorsal vertebra. Considerable destruction of the left side of this vertebra had taken place, so as to allow of the finger passing into a large collection of tuberculous matter. On the level of this collection the lung firmly adhered to the walls of the chest; and on destroying the adhesions it was found to be excavated by a large tubercular cavity, communicating largely with the tubercular collection in the spinal canal, or rather the two forming but a single collection.

This lesion may be interpreted in two ways. The point of departure may either have been the spinal canal, the lung becoming secondarily affected; or, as M. Cruveilhier believes was really the case, a superficial pulmonary cavity had, through successive ulceration of intervening parts, opened a communication with the spinal canal. He has met with analogous cases before, in the interpretation of which he found some difficulty, until the study of the progress of superficial pulmonary cavities at the anterior part of the chest shed a ray of light for the explanation of these examples of lateral caries of the spine and ribs in communication with a pulmonary cavity. In the present case only this cavity existed in the lungs, together with small black granulations of a cartilaginous hardness, which M. Cruveilhier has been accustomed to term "*tubercles de guérison*." The collection formed no communication with the bronchi, but was completely encysted. Had a free communication existed, emphysema must have resulted from rupture of the cavity, an emphysema which in this case would have commenced by the

spinal canal, and the postero-lateral part of the spine.—*Ibid.* pp. 48-52.

THE PLACENTA IN TWINS.

By M. BLOT.

M. Blot, *Chef de Clinique* to M. Paul Dubois, presented to the Society a placenta from a twin-birth, which constituted but a single mass. On injecting the arteries and veins of one of the cords with different colours, he found the fluids issue at the corresponding vessels of the opposite cord. During a year he has injected all the placentas of twin-births that have come under his notice; and he finds that there are four dispositions of parts, which may be thus ranged in their order of frequency. There may be (1) adhesion of the four membranes, two chorions and two amnions; (2) adhesion of the two chorions, the two amnions being distinct; (3) a single chorion, with adhesion of the two amnions; (4) a single amnion. This is so rare, that MM. P. Dubois and Blot have each only once met with it. In the first two of the above dispositions the two circulatory systems of the single placenta are perfectly distinct, no anastomosis existing between them. In the two others the placenta constitutes a single vascular apparatus.—*Bull. de la Soc. Anat.* 1856, p. 105.

CASE OF FATAL RETENTION OF THE MENSES.

M. Voisin presented the uterus of a woman, aged 22. Since the age of 15 she suffered periodically from severe expulsive abdominal pains, which lasted for five or six days. The Practitioner consulted recognised an obstacle to the flow of the menstrual fluid, and believing he was operating a dilatation of the vagina, really dilated the urethra sufficiently to admit of sexual intercourse. The pains having become excessive during the last five or six months, she entered the Hôpital des Cliniques. M. Nélaton found a complete imperforation of the vagina, and recognised through the rectum a fluctuating tumour, communicating with another large tumour situated in the right iliac region. On the left side he perceived a little hard tumour, which he believed to be one half of the uterus in an undilated state, the other half distended by blood constituting the fluctuating tumour. The exactitude of his diagnosis was shown at the autopsy; for on the fourth day, after a puncture had evacuated a large quantity of chocolate coloured fluid, the woman died of peritonitis. The vagina was found very dilated, and the uterus had a bifid appearance, the left half being nearly in its normal state, and communicating with the other half, which, by reason of its great dilatation, had constituted the tumour in the right iliac fossa. Each side had its tube, ovary, and round ligaments. A perforation external to the Fallopian tube had caused the peritonitis.

M. Gallard stated that having collected all the published cases of menstrual retention, he had found that in five or six the uterus was dilated, the Fallopian tube participating in the dilatation in some of these.—*Bull. de la Soc. Anat.* 1856, p. 145.

GENERAL CORRESPONDENCE.

AMYLENE.

[To the Editor of the Medical Times and Gazette.]

SIR,—On Saturday last (January the 17th) the new anæsthetic agent, amylene, was employed for the first time at St. Bartholomew's Hospital. Its effect in two cases was upon the whole satisfactory. In the first, lithotomy performed by Mr. Skey, it was administered to a man of 65 years of age who had undergone several previous operations without chloroform. The vapour of amylene was administered by Dr. Martin, by means of Dr. Snow's inhalers, and was unaccompanied by any of the disagreeable effects so frequently attendant upon the employment of chloroform. No cough, no sickness, very slight change of pulse either in frequency or in power, no stertorous breathing, but a quiet imperceptible loss of sensibility to pain. Of this, however, the patient afterwards informed me, as from his external appearance and exclamations during the operation I firmly believed the trial of amylene to have proved a total failure. He struggled, complained loudly, and even immediately after the operation declared that he had suffered his usual amount of pain. Shortly afterwards he ate his dinner, although for the rest of the day he was somewhat giddy and faint.

The second case was that of a small exostosis removed from beneath the great toe-nail of a young girl by Mr. Coote, who divided the soft parts at the top of the toe by an incision down to the neck of the growth. This was detached by a strong knife, and enucleated from the surrounding parts with ease, without the removal of any integument, the opening not being much larger than that of a common lancet puncture. The operation, although small in extent, would have been most painful from its situation, had it not been for the successful employment of amylene.

This was administered as in the previous case, although the girl had (owing to some mistake as to the day upon which Mr. Coote would operate) just partaken of a hearty dinner. The only observable effects were—slight flushing of the countenance, with gentle acceleration of pulse, and (as was declared at the time) great dilatation of the pupil. This, however, I believe to be an error, as the girl has naturally a pupil of unusual size. During and after the operation she became slightly hysterical, but she recovered rapidly without other disagreeable effects beyond a slight headache.

The time occupied in inhaling the amylene, before any positive effect was produced, was in both cases longer than that required for the administration of chloroform. The quantity used was also proportionately greater. I will only further remark, that the odour of amylene was pronounced, in the opinion of many bystanders, to be most disagreeable.

I am, &c.

FRANCIS W. SKEY,

House-Surgeon to St. Bartholomew's Hospital.

St. Bartholomew's Hospital.

P.S.—Since writing the above, lithotomy has again been performed by Mr. Skey upon Case No. 1 described in my letter. The amylene was administered for four minutes only, notwithstanding which the patient informs me that he was totally unconscious of the operation, but that he had suffered from rather a distressing dream during its performance. His pupils were, in this instance, certainly in no way affected by the inhalation of the vapour.

KNOWLEDGE OF HINDUSTANI.—INDIAN SURGEONS.

[To the Editor of the Medical Times and Gazette.]

SIR,—Many young surgeons come out to India in the H. E. I. C. S., with a very erroneous idea of the examination in native languages required to be passed before they receive their extra pay and allowances. I myself left England with the idea that the examination consisted of written and verbal examinations in two or three different dialects, and that the Bagh or Bahur was one of the books used: such is not the case.

The examination is entirely *viva voce*, and consists of twenty or thirty questions, chiefly relating to hospital duty, given in English to be translated into Hindustani, or *vice versa*; no knowledge of the Hindustani alphabet is required, and but little of the grammar. I found Forbes's little manual very useful, and indeed the only book I have used. I have, besides, employed a Moonshee.

Yours, &c.

ASSIST. SURG. H.E.I.C.S.

Peshawur, Oct. 24, 1856.

PROTRACTED BIRTH OF A SECOND TWIN.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your Journal of to-day there is a communication from Mr. A. Prideaux respecting the protracted birth of a second twin at a labour he attended.

The plan he adopted of leaving the patient before the second child was born, and after having ruptured the membranes, is to me so novel, that I am induced to ask, being a Junior Practitioner, whether such was the correct plan of treatment to be pursued?

All the writers on Midwifery I have studied, have advised the Medical man to wait a certain time, providing there were no untoward symptoms to require immediate interference, and then, if labour did not come on, to introduce the hand, and turn the child, and deliver; but *on no account to leave the house until the second child was born.*

In this case, Mr. Prideaux seems to have done nothing to induce labour except rupturing the membranes. Now in several cases that occurred to me last year, after waiting two

hours, and labour not coming on, the membranes being ruptured, and the head presenting, I employed friction with the hand over the uterus for twenty minutes, and gave 9j doses of ergot every ten minutes until three doses had been taken. In all these cases labour came on, varying from half an hour to an hour, and was very quickly terminated. Had it not been so, I certainly should not have left my patient until the child had been born, for if flooding had come on the woman might have died before any one could have got to her.

I am, &c.,

January 24, 1857.

M.R.C.S., L.S.A., & L.M.

ARMY MEDICAL OFFICERS AT SCUTARI.

[To the Editor of the Medical Times and Gazette.]

SIR,—Your remarks on the hitherto unrequited claims of the Medical officers who served at Scutari are deserving of every consideration, and entitled to the highest praise.

Many of these officers have not even a ribbon or a medal to show, after a period of unexampled care and toil, and anxious and harassing duty in the pestilential wards and crowded corridors of that large institution, where not a few of them lost their lives in the faithful discharge of their duties. Who has not heard of McGrigor? and of Wishart, whose time was devoted to the spiritual as well as the temporal wants of the sick and wounded? I am sure that the friends and relatives of these, as well as of many other deceased officers, would highly prize any honour or distinction that might be conferred on their memory.

It may be said that, because they did not actually land and serve in the Crimea, they are not entitled to the medal; but it should be remembered that it was not the fault of these officers that they were left behind at Varna and Scutari, and did not accompany the army to the Crimea.

But even admitting that they are not, on this account, to be honoured with the Crimean ribbon and medal, there is no reason why they should not receive the Turkish medal, or Order of Medidjie, to which they are fairly and justly entitled, and which, I feel assured, would be granted to every Medical officer who served at Scutari, if their claims were recommended and supported by the Director-General of the Army and Ordnance Medical Department, who could easily procure a list of those officers' names who served there, especially when it is remembered that the Order of the Medidjie has been already bestowed on the ladies and nurses who afforded such valuable support, and unceasing care and attention to our sick and wounded soldiers.

Trusting that these remarks will receive the support of your valuable and influential paper, I am, &c. SCUTARI.

[To the Editor of the Medical Times and Gazette.]

SIR,—As a member of the Army Medical Department, who has served during the most eventful period in the history of the Scutari Hospitals, I beg you will permit me to offer you my best thanks for your advocacy of our claims in the able article which appeared in the last number of the *Medical Times and Gazette*, proving by unanswerable facts and argument the unfairness of our total exclusion hitherto from all participation in the selections for promotion and honorary distinction which have been conferred on others of the department, in recognition of their services during the late war. As a public representation so convincing as that which you have advanced is far more powerful than any private appeal, I trust your kind advocacy of the claims of the Scutari Medical officers will be recognised by the authorities, and that we may not be left as at present with an almost implied disgrace by total exclusion from the rewards and honours granted to others in recognition of their services.

I am, &c.

A STAFF SURGEON.

Jan. 26, 1857.

CANCER CURING.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have just read with interest the case of cancer removed from the breast by the application of a solution of chloride of zinc, as related in the *Journal* of January 10th; and also Professor Simpson's communications on the effects of escharotics in the treatment of cancer and cancrroid diseases, contained in the *Journal* of the following week.

It has occurred to me that the following case has some bearing on the subject, and might, therefore, be worthy of record:—

About eight years ago, while on a visit to a fellow-student, he took me to see a case under his care, which proved to be a large ulcer in the breast of a woman. I was shown at the same time a shapeless, tumour-like mass, as large as a boy's fist, which had been removed from the breast by a cancer-doctor, leaving the ulcer alluded to. The removal was effected by means of a coarse powder, which had been applied continuously for some months, causing severe and almost incessant pain. On examining the powder, I found it to contain what appeared to be fragments of the leaves of a species of *ranunculus*. It also contained sulphur, indicated by the blue flame and odour emitted when thrown on the fire. The other ingredients I could not ascertain.

This cancer-doctor occupies the humble position of a shepherd. His fame and practice extends over several counties. The peasantry, and many besides who would scorn the name, place implicit faith in his skill. He is said to have obtained his secret from a French doctor, a prisoner of war.

I am, &c.

J. GILCHRIST.

Royal Lunatic Asylum, Montrose,
January 28, 1857.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, January 6, 1857.

(Continued from page 99.)

Mr. ARNOTT, President, in the Chair.

Mr. CURLING showed a specimen of MELANOTIC GROWTH IN THE ORBIT EXTERNAL TO THE GLOBE.

A man in poor health, aged 48, had been admitted into the London Hospital, his right eye being pushed out by a growth behind it. The first symptoms had been noticed four months ago. The eye was destroyed by pressure, and the lids everted. Extirpation of the entire contents of the orbit was performed. The growth proved to be a large mass of melanosis external to and behind the sclerotic. It was united closely to the sclerotic and to the optic nerve, compressing the latter, and extending deeply into the orbit. Profuse bleeding followed the removal, and was arrested only by free application of the cautery. Mr. Curling directed attention to the unusual feature of the case, which was, that the disease was external to instead of within the globe.

Mr. BIRKETT showed a preparation illustrating the condition of

DIRECT INGUINAL HERNIA.

He introduced the specimen by remarking upon the rarity of the form of hernia exemplified. It had been taken from the body of an old man of 81, who had been operated on for strangulated hernia in Guy's Hospital. In the operation it was noticed that the finger came rapidly down to the neck of the sac, much more quickly than in oblique hernia, however much the inguinal canal may have been shortened. The neck of the sac was sharp and very rigid. The patient died of exhaustion.

Dr. O'CONNOR showed a preparation and large wax model of

COLLOID DISEASE OF THE ABDOMEN, ASSOCIATED WITH SCHIRRUS OF THE PYLORUS,

taken from a man, 46 years of age, a native of Milan, by trade a frame-maker, who was admitted under his care at the Royal Free Hospital, on the 20th of October last. When first seen he complained of severe pains in the epigastrium, rather to the right side, difficulty of breathing, the abdomen was swollen, and he was slightly jaundiced. The pulse was small and frequent, over 100. He was rather thin, and had an anxious expression of countenance. On examination of the chest there was no evidence of any disease of the heart or lungs. On the 23rd the symptoms were very much relieved by the treatment adopted, but on the 30th they were more urgent, the pain in the epigastric region was of an excruciating character, and there was general dropsy with jaundice. Suitable treatment was adopted, consisting of alteratives with

diuretics, and a blister to the painful part. By the 7th of November the dropsy and jaundice disappeared, and the only uneasiness complained of was pain of the same character in the epigastric region, with tenderness on pressure to the left of the umbilicus. The great size of the abdomen being now reduced, on a careful examination a hard mass was felt occupying the epigastrium, extending from the under surface of the liver to the left hypochondriac region, descending to and filling up the left iliac fossa. On inquiry it was learned that he had suffered more or less for nearly two years from the pain in the epigastrium, with frequent attacks of nausea and retching, and that he had once before had an attack of jaundice. During those attacks he was alternately under the care of Mr. Pollock of Hatton-garden, and an out-patient at St. Bartholomew's Hospital. Mr. Pollock attended him some months ago for enlargement of the right testicle, which ultimately got well. Dr. Connor now viewed the case as one of malignant disease, which he supposed to be primarily connected with the stomach, and from thence extending throughout the abdomen. On the 18th of November the patient complained of more severe pain all over the abdomen, intense and frequent thirst, constant retching, pain and starting of the left lower extremity; the pulse was 140, the urine scanty, and loaded with urates; the skin hot, the tongue was furred, and the bowels were constipated throughout; they were only relieved by castor oil or some other aperient. In the course of a few days the patient vomited a quantity of fetid purulent matter, free from fæces, and the urgency of these symptoms were lessened. The enlargement in the left iliac fossa now became less, and the starting and painful state of the left lower extremity nearly disappeared, the tongue became clean, the urine abundant and clear. On further examination, nodulated masses could be distinctly felt over the whole of the abdomen. The retching became more frequent, and nothing could be borne on the stomach. Even a teaspoonful of cold water or a little ice gradually dissolved in the mouth, as soon as it reached the stomach was directly thrown up, and it was necessary to sustain the patient by enemata of brandy and beef-tea. All this time there was occasional vomiting of the same purulent matter as before. He gradually sank, and died on the 16th of December. A post-mortem examination was made thirty-six hours after death. The body was completely emaciated, and nodulated masses could be felt through the abdominal walls. On opening the abdomen, which contained about three pints of serum, and reflecting the parietes, as seen in the model and drawing, the following structures presented themselves from above downwards. A small portion of the left lobe of the liver. A nodulated mass in the situation of the omentum, concealing all the other structures, excepting the left iliac fossa, where a small portion of the sigmoid flexure of the colon rested on the abdominal parietes. The reflected parietes presented nodules of colloid cancers. The organs of the abdomen were removed *en masse*, being all connected together by a large and apparently colloid and encephaloid growth. Their relations to each other are altered in various ways by pressure of the growth which had infiltrated their structure. Thus the pyloric extremity of the stomach is dragged down, so that the longitudinal axis of that organ is more vertical than usual. When opened and viewed posteriorly, a large mass of cancer was seen, the centre portion of which was scirrhous, and the peripheral portion colloid. The mucous membrane of the pylorus was destroyed. The peritoneal surface of the stomach presented nodules of colloid, but the mucous membrane was entire, except at the pylorus. The liver, especially the right lobe, was much compressed by the diaphragm, which was itself thickened throughout its entire extent by a layer of cancerous deposit. This layer had not superseded the muscular and tendinous structure of the diaphragm, although from pressure it would appear that the muscular portion had been atrophied. The inferior cava and hepatic duct were surrounded and compressed by the general mass, and the gall-bladder was, therefore, much engorged. The structure of the spleen was compressed, from pressure of the surrounding cancers, which had encroached into the hilus, with which it accurately corresponded; but the interior was free from cancer, and otherwise healthy, excepting two buff-coloured spots, the nature of which was not known. The kidneys and supra-renal capsules were healthy, but the latter were compressed and atrophied. The pancreas was identified with the general mass, which extended downwards throughout the omentum; and the transverse colon

lay in a groove surrounded, but not infiltrated, with cancer. The remaining portion of intestines, large and small, was free and unobstructed; but a few convolutions, which lay across the lumbar vertebra, were reduced almost to the size of a quill. The bladder was healthy, and so were the lungs and heart, but the veins of the latter were very turgid. On microscopical examination, the growth proved to be made up of scirrhous colloid and encephaloid. A very beautifully executed model by Tuson was exhibited, showing the appearances presented on opening the abdominal cavity. Dr. O'Connor observed that there were two cases recorded in the "Transactions of the Pathological Society of Dublin," one by the late Dr. Greene, and the other by Dr. Lees, very nearly resembling his case. In Dr. Greene's case, however, there was no retching or vomiting until about ten days before death, when a coffee-coloured fluid was thrown up; but there was ulceration of the stomach. The patient had been complaining for nine months. In Dr. Lee's case the patient had complained only for five weeks. There was pain or tenderness on pressure, but there was frequent vomiting, and no ulceration of the mucous surface of the stomach, although the disease was nearly as extensive as in the case related that evening. In the current number of the *Glasgow Medical Journal* there was a nearly similar case, recorded by Dr. J. Ball, occurring in a woman 30 years of age, who died in eight months after the first symptom was complained of.

Dr. BRINTON confirmed Dr. O'Connor's designation of the disease as colloid. He had made a careful examination with the microscope, and had found the elements of that form of cancer well marked.

Mr. HUTCHINSON showed a specimen of

MYELOID EPULIS ASSOCIATED WITH ENLARGED GLAND.

It had been removed by his friend, Mr. McWhinnie, from the lower jaw of a pale cachectic man, aged 30, in whose mouth it had been growing for about a year. Externally it was smooth, rounded, dense, and gum-like, and its base was somewhat constricted. Thus far it resembled the ordinary forms of epulis, from which, however, it differed in being, instead of pale, of a deep mottled, purple colour, and in having ulcerated, and been the seat of frequent hæmorrhage on its inner side. It had been somewhat painful, and there was a small gland perceptibly enlarged under the border of the jaw. Its colour, ulceration, and hæmorrhage, connected with the enlarged gland, and the man's cachectic state, had induced several Surgeons to suspect its malignancy. It was freely removed, together with the alveolar process from which it grew, by means of curved bone forceps. It proved to be an excellent specimen of myeloid disease, its section displaying the various shades of yellow and red characteristic of that structure, and under the microscope numerous typical examples of the large poly-nucleated cells being seen. There was much soft bone throughout its structure. It was about the size of a small walnut. Since the operation the wound had healed, but the gland under the jaw had decidedly increased in size. Mr. Hutchinson remarked on the great rarity of gland enlargement in myeloid disease, and stated his suspicion that the case, like one he had previously brought before the Society, would prove in its history to be one of those connecting links between myeloid and cancer. He was well aware that myeloid epulis was not infrequent, although in his experience he had met with but few examples compared with those of the fibrous variety.

JANUARY 20, 1857.

Dr. WATSON, President, in the chair.

The PRESIDENT, on taking the chair for the first time, thanked the Society warmly for the honour which they had done him, more especially as he had not heretofore been much connected with it. In the course of some very appropriate remarks upon the usefulness and objects of the Society, he dwelt particularly upon its bringing forward a great number of new contributions to science, and also preventing the diffusion of many errors. On its advantages as authenticating observations, he remarked especially, believing it to be of great importance that supposed novelties in Pathology should be submitted to the scrutiny of a Society like the present, prior to their public announcement. He congratulated the Society on its previous career, and expressed his conviction that its

future would be equally prosperous. He had accepted the office conferred upon him with great pleasure, and looked forward to the fulfilment of its duties as that from which he should derive much satisfaction and profit.

Several new members having been ballotted for, the Society then proceeded to its usual routine of business.

Dr. WILKS read for himself and Dr. BRINTON a report on their examination of Mr. Curling's specimen of

SUPPOSED CANCER OF THE PROSTATE.

They had made careful and independent microscopic examinations, and had both arrived at the same conclusion. No elements at all resembling those of cancer had been discovered, and they agreed with Dr. Andrew Clarke's previously expressed opinion, that the disease was merely hypertrophy of the gland. It was interesting that three independent observers with the microscope should have coincided in a conclusion so different from that of those who had examined the specimen only with the naked eye.

Dr. MARKHAM next brought before the Society a specimen of

CANCER OF THE GALL-BLADDER.

The patient, a woman aged 28, had died under his care, after an illness of only three months. Deep jaundice, severe pain after food, and sickness, had been the chief symptoms. The specimen showed the gall-bladder affected by cancer in almost its whole extent, and in some parts the disease had also encroached upon the liver. There were also small cancerous deposits in the pleura and peritonæum.

Mr. HULKE showed two specimens of

TRUE BONE FOUND IN THE HUMAN EYE.

In the first case the eye had been a lost organ, from some chronic choroidal disease. The osseous plate was found between the choroid and retina, in the back part of the globe. It showed, under the microscope, the structure of true bone. In the second case the eye was one which had been given him by Mr. Bowman. In it a thin cup of bone occupied the position of the choroid, and had probably resulted from inflammatory effusion within it. In it, also, the structure was true bone. There were also many small octohedral crystals adhering to it, believed to be oxalate of lime. Both specimens were illustrated by drawings from the microscope of sections of the osseous plates.

Dr. SIBSON next brought before the Society a specimen of

CROUPOUS EXUDATION, LINING THE TRACHEA AND BRONCHI.

The patient, a young woman, had died after a short illness, unexpectedly to himself. He had seen her on the morning previous to the day of her death, and had not apprehended any danger. The death had been from dyspnoea, which had gradually increased for twenty-four hours. The specimen showed croupous exudation, lining the trachea and passing down into the bronchi even to their smallest ramifications. The lungs were much engorged, and in parts quite consolidated.

Dr. COCKLE showed a specimen of

SACCULATED ANEURISM OF THE AORTA.

The patient, a middle-aged man, had presented the usual symptoms of thoracic aneurism, and a pulsating tumour had been perceptible through the walls of the chest. Death had finally occurred from rupture of the aneurismal sac into the pericardium. The aneurismal cavity was bilocular and sacculated. Dr. Cockle adverted to the extreme rarity with which aneurisms which have once presented externally, end by rupture into the pericardium. He had been informed by Dr. Sibson that this was only the second instance of the kind on record.

Mr. OBRE showed for Dr. Boyd two specimens of

SOFTENING OF THE SPINAL CORD.

Both the preparations had been taken by Dr. Boyd from patients who had died under his care in the Somerset County Lunatic Asylum. In the first, a carpenter of middle age had been admitted on account of melancholia. He had subsequently had convulsions, followed by loss of power in the lower extremities, and complete paralysis of the sphincters. Nine months after the first convulsion death occurred. The right hemisphere of the brain was found atrophied, and weighed several ounces less than the other. The spinal cord, throughout its whole length, was much softened. Its arach-

noid investment was acutely inflamed, and contained fetid pus. The second specimen was from a man, aged 32, who had been imbecile for a considerable period prior to death. He was unsteady in his walk, and had twitchings in the muscles of the face. He afterwards suffered from convulsions, and lastly, from complete paralysis of the lower extremities. The right hemisphere of the brain was found at the post-mortem smaller than the left, and the spinal cord was much softened in its lower part.

Mr. COOPER FORSTER showed a specimen of

MEDULLARY CANCER OF THE FIBULA.

It had been removed by amputation through the thigh, by Mr. Hilton, from a little girl aged 8. The disease dated a year back, and in May last Mr. Hilton had urged upon the parents, without avail, the propriety of immediate amputation. Since that the tumour had grown to a very large size, the inguinal glands had become enlarged, and the patient had emaciated to an extreme degree. Under these almost hopeless circumstances, the amputation had finally been performed at the urgent request of the parents. The specimen showed a very large growth of medullary cancer, involving almost the entire length of the fibula, which was completely disintegrated. In parts the growth encroached upon the tibia, but that bone was not itself diseased. The operation had only been performed that morning, and Mr. Forster promised to report to the Society the final result of the case at some future time.

Dr. SIBSON showed a specimen of

MALIGNANT TUMOUR AT THE BASE OF THE BRAIN.

The tumour was a circumscribed growth, the size of a large walnut, but nearly round, which grew from the left crus of the cerebellum, and had pressed upon that part. It had destroyed the seventh nerve and much compressed the fifth. The patient was a gentleman of middle age, who had died after a protracted illness. One of his earlier symptoms had been peculiar ill tastes in his mouth. These had been variable, and would last with great intensity for a few days, and then for a time cease to be perceived. Latterly a most troublesome and almost constant symptom had been the very profuse flow of saliva. This continued both sleeping and awake, and on waking he would often vomit large quantities which had been swallowed. The case was of much interest, as proving that the fifth nerve influenced the secretion of the salivary glands. The tumour was believed to be of malignant nature.

(To be continued.)

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 16th inst. :—

BAKER, THOMAS STEPHEN, Moreton-in-Marsh.

DICKIN, WILLIAM ACHERLY PARKES, Wem, Shropshire.

GILMOUR, ROBERT, Royal Navy.

HARKNESS, WILLIAM WARWICK, Dalston-lane, Hackney.

PATERSON, ANDREW, Dumfries.

PRESTWICH, JOSEPH, Radcliffe, near Manchester.

PLYE, THOMAS THOMPSON, Earsdon, Northumberland.

RUDDOCK, WILLIAM, Keighley, Yorkshire.

WHITAKER, JOHN HENRY, Louth, Lincolnshire.

At the same meeting of the Court Messrs. EDWARD M'SORLEY and JOHN COOGAN passed their examinations as Naval Surgeons. These gentlemen had previously been admitted members of the College, their diplomas bearing date respectively June 28, 1850, and August 2, 1852.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, January 22, 1857 :—

COSTERTON, HORATIO, Australia.

HALL, CORNELIUS S., Hienfield, Sussex.

PITMAN, EDWARD HANBURY, Eastbourne, Sussex.

On the 15th,

SPENCER, GEORGE, Ramsgate.

EXAMINATION FOR ASSISTANT-SURGEONCIES IN THE HON. EAST INDIA COMPANY'S SERVICE, JANUARY, 1857.—The names of the successful candidates at the recent examination are arranged in order of merit. One of the fortunate men is a Parsee, who has studied at Bombay and in England, and is, we understand, a man of very considerable acquirements:—

CAYLEY, HENRY, M.R.C.S. Eng.
 BEST, ALEXANDER VANS, M.B., M.R.C.S. Eng.
 GILLET, CARTHEW, M.R.C.S. Eng.
 WHITE, JAMES HENRY, M.R.C.S. Dub.
 PENNY, JAMES, M.D. Lond.
 SIMPSON, ALEXANDER, M.A., M.D., M.R.C.S. Ed.
 HILSON, A. A., M.R.C.S. Ed.
 CARNEY, JOHN, M.R.C.S. Ed.
 DICKINSON, JAMES CHARLES, M.R.C.S. Eng.
 ROSS, JAMES, M.B., M.R.C.S. Ed.
 SMITH, WILLIAM C., M.D., M.R.C.S. Ed.
 RADDOCK, CHARLES EDWARD, M.R.C.S. Eng.
 POWELL, THOMAS, M.R.C.S. Dub.
 SHIEL, JOHN, B.A., M.B. Trin. Coll., Dub., M.R.C.S. Dub.
 KELLY, WILLIAM P., M.R.C.S. Dub.
 HEARD, SAMUEL J., M.D., M.R.C.S. Ed.
 LALOR, JAMES, M.R.C.S. Ed.
 SMITH, ARNOLD, M.D., M.R.C.S. Ed.
 DE FABECK, WILLIAM, M.R.C.S. Eng.
 WHITTON, GEORGE, M.B. Trin. Coll., Dub., M.R.C.S. Dub.
 RUSTOMJEE, B., M.D., M.R.C.S. Eng.
 BEAUMONT, THOMAS, M.R.C.S. Dub.

DEATHS.

CORNELIUS.—Jan. 21, at Leicester-terrace, Northampton, Henry Thomas Cornelius, Esq., Surgeon in the Government Emigration Service, aged 34.

M'CAULEY.—Oct. 30, at Melbourne, Dr. M'Cauley, Surgeon H. M.'s 40th regiment. The deceased came to his death under the following melancholy circumstances:—After an inspection of troops by the Governor, between 12 and 1 o'clock, Ensign Pennefather rushed out of his room with a six-barrelled revolver in his hand, and meeting Ensign Keith, he presented and fired at him, the ball passing through his cheek and out at the back of his neck. At this time Dr. M'Cauley was seated in a chair on the grass in front of his quarters, reading. The doctor was an invalid, from an accident. Pennefather ran to where Dr. M'Cauley was sitting, and placing the pistol on the doctor's mouth, he fired, and the ball passed out at the back of his neck. The murderer then placed the pistol to his own head and fired, the ball entering his right temple. Dr. M'Cauley died in his chair after one or two ineffectual attempts to speak or respire. Evidence was conclusive as to the insanity of Pennefather.

BEQUESTS.

SIMPSON.—The late Miss Maria Simpson, of Lichfield, has left the following charitable bequests:—The Birmingham General Hospital, £500; the Lichfield Dispensary, £150; the Institution of Nursing Sisters, Broad-street, London, £150. And upon the decease of the above-mentioned lady, the following legacies, left by her deceased sister, Miss Jane Eliza Simpson, become payable:—The Lichfield Dispensary, £50; the Institution of Nursing Sisters, Broad-street, London, £50.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—The following gentlemen will be ballotted for at the meeting of February 10th:—Robert Brown, George Green Gascoven, Henry Walter Kiallmark, Felix William Lyon, William Overend Priestley, Henry Ranke, John Stanton, and Philip John Van Der Byl. The election of an Honorary Fellow, in the room of the late Dr. Buckland, Dean of Westminster, will take place on the same evening. The gentleman recommended by the Council for that honour is Dr. Wm. Farr, F.R.S., of the General Register Office.

THE QUEEN'S COLLEGES IN IRELAND.—The Government, it is said, is about to issue a commission, at the head of which Mr. Temple is likely to be placed, for the purpose of inquiry into the internal economy, curricula of education, and attendance of the presidents, professors, and into the rules and regulations which govern each of the Queen's Colleges in Ireland, with a view to their modification and improvement.

ORDER OF THE BATH.—At an investiture of this Order, on Saturday, Dr. J. B. Gibson, Deputy Inspector-General of Hospitals, and R. C. Elliott, Senior Surgeon, Royal Artillery, received from the Queen the insignia of Companions of the Bath.

CLOSE OF THE LONDON GRAVEYARDS.—The Home Secretary has issued instructions for a strict survey of all the grave-yards and church-vaults in London, so as to enforce the provisions of the Metropolitan Burial Act for the preservation of the public health.

THE NEW SEAMEN'S HOSPITAL.—The new Seamen's Hospital, Caledonia, was lashed alongside the Dreadnought on Monday. The Dreadnought is ordered to be conveyed to Woolwich to be broken up. The Caledonia (to be named henceforth Dreadnought) is completed, with the exception of the screen-work to form the chapel.

MEDICAL BENEVOLENT FUND.—At the last meeting of the Committee of this Fund, held in New Burlington-street on the 27th instant, the following gratifying letter was read from Mr. Littleboy, of Hemel Hempstead, addressed to the Hon. Sec.:—"As one of the executors of the late Mr. Thomas Camps, Surgeon, Fenny Stratford, I have much pleasure in informing you that Mr. Camps has given the Institution a legacy of £750, free of duty. He has also made the Institution his residuary legatee, and I hope that on the realization of his various effects there may be a considerable sum to pay over."

GERMAN HOSPITAL, DALSTON.—The Annual General Court of the Governors of this Charity took place on Monday at the London Tavern, Bishopsgate-street. The balance sheet represented the receipts at £3617 5s. 7d., and the expenses at £3555 6s. 7d., leaving a balance of £61 19s. The Report was adopted, and votes of thanks were passed to the various officers of the Charity. Dr. Rasch was then elected honorary medical officer to the Eastern Dispensary, and the business terminated.

THE NEW MILITARY HOSPITAL AT NETLEY.—The foundations of this Hospital are now completed. They are surmounted by granite plinths, on which the immense superstructure is to be raised. It is proposed to build barracks, a military lunatic asylum, and the Nightingale hospital for nurses, in the neighbourhood of Netley. Beneath a solid bed of gravel in which the foundations of the hospital are laid is a thick layer of sand, which will be pierced for Artesian wells. A huge sea wall will be built on the beach, to protect the cliff on which the hospital will stand.

THE POOR-LAW MEDICAL OFFICERS.—At a very numerous meeting of Students of University College, held on Saturday, Jan. 24, 1857, for the purpose of supporting Mr. Griffin's movement, W. Price Jones, Esq., in the Chair,—The following resolutions were proposed and carried unanimously:—Resolution No. 1. Proposed by Mr. Mackridge, seconded by Mr. Hayward; That the thanks of this meeting be cordially given to Mr. Griffin, for his exertions on behalf of the Union Medical Officers. No. 2. Proposed by Mr. Thomas, seconded by Mr. Jeaffreson; That this meeting pledges itself to support the movement commenced by Mr. Griffin, and considers that the salaries now paid to Union Medical Officers, affording very inadequate remuneration, should be revised and increased. No. 3. Proposed by Mr. Fox, seconded by Mr. Jessett; That this meeting regards the objects sought to be obtained by it as not only of serious importance to the welfare of the whole Medical Profession, but also as involving the true interests of the public at large.—No. 4. Proposed by Mr. Drysdale, seconded by Mr. Coff; That in order to secure to the scientific medical practitioner the fruits of his labour and self-denial in study, it is desirable that Government should not appoint to any public situation any but such as have, by public examination, proved themselves to be the fittest men to fill the post; and this principle is applicable to the appointment of medical officers connected with the Poor-law, as this is in reality a public service.—No. 5. Proposed by Mr. Reid; seconded by Mr. Leevan, B.A.; That this meeting considering the unity of purpose and good faith among members of the Profession of vital importance to the cause of Poor-law Medical reform, desires to express its unqualified disapproval of the conduct of those members of the Profession, who not only treat this movement with contempt and apathy, but even act contrary to its principles.—No. 6. Proposed by Mr. Richards; seconded by Mr. Alford; That

this meeting shall adopt measures to form a branch association among medical students, and other junior members of the profession, in aid of Mr. Griffin's movement.—No. 7. Proposed by Mr. Jearesson; seconded by Mr. Squire; That the resolutions of this meeting be forwarded to the medical and other leading journals, and also to Mr. Griffin, with the expression of its warmest and most zealous sympathy.—No. 8. Proposed by Mr. White; seconded by Mr. Thorneby; That in order to testify their sympathy in a practical manner, a shilling subscription be opened, and the sum collected to be placed to the account of the Poor-law Medical Reform Association at Williams' Bank.—No. 9. Proposed by Mr. Marriott; seconded by Mr. Rees; That in order to carry out the objects of this meeting, a Committee be formed, consisting of a chairman, honorary secretary, and other gentlemen—the Committee to consist of Mr. W. Price Jones, *Chairman*; Mr. J. Mocke-ridge, *Treasurer*; Mr. E. W. Thomas; Mr. D. Richards; Mr. Drysdale; Mr. W. T. Fox, *Hon. Sec.*—No. 10. The thanks of the meeting were cordially given to the Chairman, for the able manner in which he conducted the meeting, and for his zealous exertions on behalf of the movement.—William Tilbury Fox, *Hon. Sec.*

FEES FOR MIDWIFERY ENGAGEMENTS.—At the Goole County Court, Tuesday, January 27, a case was tried before W. Walker Esq., Judge.—*Gillard v. Fox.*—The plaintiff was a Medical Practitioner, residing in Thorne, and the defendant, a labourer, living at Cowick; and the action was brought to recover a sum of ten shillings and sixpence, under the following circumstances:—The plaintiff, who conducted his own case, on being sworn, deposed that in consequence of information received from the mother of defendant's wife, he went to Cowick, in September last, and saw defendant's wife; on which occasion he ordered her some castor-oil; and that he was then engaged by her to attend her in her approaching confinement, which was expected to take place in November; and, in consequence of such engagement, held himself in readiness to attend her; but had not been sent for; and was subsequently informed of the confinement, and that another Medical man had attended. The amount of the fee was arranged; it was to be a guinea if two visits were required, but if he was only required to attend once, the fee was to be 17s. 6d. Cowick was six miles from Thorne. He had written to Fox, demanding 10s. 6d. for his fee, and stated in his letter, that as he had not been sent for he should not require the whole fee; but no notice had been taken of the application, and the case had, therefore, been entered in this court; and he submitted he was entitled to recover on two grounds—1st, He had been engaged, and from that moment the fee was due, he having been ready to attend when required; and 2ndly, if his Honour should decide against him on that point, he was at least entitled to recover for his visit and professional advice; it was not the amount of the fee he so much cared for, as the principle he wished to establish. Mr. Jennings, solicitor for the defence, raised an objection—1st, That as plaintiff's services had not been required, he was not entitled to recover for the midwifery fee; and that, on the occasion of Mr. Gillard's visit, defendant's wife had not desired her mother to send him, and, therefore, defendant was not liable. 2ndly, He would place defendant's wife in the witness-box, who would altogether deny the engagement; and he therefore contended that defendant was entitled to a judgment. The plaintiff here stated that he had Mr. Cass, surgeon, of Goole, in attendance, to prove the practice of the Profession: but His Honour stated that he did not consider the evidence of Mr. Cass necessary, as he was perfectly clear on that point, which he would decide against defendant; for if the plaintiff was engaged, he was entitled to recover. He was, however, ready to hear Mr. Jennings on the point as to the engagement. Defendant's wife was therefore called, and, on being sworn, stated that the plaintiff did come to Cowick; that she did not desire her mother to send him, and that she (witness) never engaged him to attend her in her confinement. His Honour said it was very unpleasant to decide a case where the evidence was so contradictory, but from Mr. Gillard's evidence, supported by his books, he must consider that he was correct. There would, therefore, be a judgment for plaintiff for 10s. 6d., with costs 2s. 10d., and 8s. for plaintiff's attendance; the whole to be paid on February 4.

MORTALITY NOTABILIA.—The deaths registered in London, which in the two previous weeks had been 1135 and

1171, rose in the week that ended last Saturday to 1216. In the ten years 1847-56 the average number of deaths in the weeks corresponding with last week was 1177. But if the deaths of last week are to be compared with the average, the latter should be raised proportionally to the increase of population, in which case it will become 1295. Hence it will be seen that although the rate of mortality has been rising lately, it is still below the average. In comparing the results of the last two weeks an increase is observed in the death of old persons. In the present as compared with the previous return there is an increase in zymotic diseases, and also in diseases of the nervous system and the heart; whilst the numbers referred to pulmonary complaints are almost identical, and deaths by phthisis (or consumption) decreased from 152 to 135. Measles was fatal last week in 26 cases. This complaint appears to have prevailed in the Norwood Workhouse, as four young children died there from it between the 11th and 17th January. A musician who resides at 117, Lillington-street, Westminster, has lately lost all his children (four daughters) from measles.

BIRTHS.—The births of 904 boys and 885 girls, 1789 children, were registered; average 1553.

METEOROLOGY.—The mean height of the barometer in the week was 29·547 in. The highest reading was 30·20 in. at the beginning of the week; the lowest 28·97 in. on Saturday.

DEATHS IN PUBLIC INSTITUTIONS for the Weeks ending Saturday, January 24 :—

	In the Week ending Jan. 17.			In the Week ending Jan. 24.		
	Males.	Females.	Total.	Males.	Females.	Total.
Workhouses	46	71	117	71	80	151
Prisons	2	..	2	..	1	1
Military and Naval Asylums	6	..	6	7	..	7
General Hospitals	34	23	57	45	16	61
Hospitals for Special Diseases	2	4	6	2	3	5
Lying-in Hospitals .. .. .	..	..	..	..	1	1
Military and Navy Hospitals	4	..	4	3	..	3
Hospitals and Asylums for Foreigners .. .. .	..	..	..	..	1	1
Lunatic Asylums	2	6	8	4	7	11
	96	104	200	132	109	241

DEATHS REGISTERED in the Metropolis for the Week ending Saturday, January 24, 1857.

CAUSES OF DEATH.	In the Week ending Saturday, Jan. 24, 1857.						Averages of Temperature and Deaths in 10 Weeks.
	Deaths of Persons.						
	AT ALL AGES. Mean temp. 32°2	Under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.	At 80 Years of Age and Upwards.	
Mean Temperature	32°2						38°2
ALL CAUSES	1216	531	163	188	241	74	1177
SPECIFIED CAUSES	1195	529	163	188	241	74	1166
DISEASES:—							
1. Zymotic Class	241	194	20	11	13	3	241
2. Dropsy, Cancer, and others of uncertain seat	46	6	10	13	13	4	50
3. Tubercular Class	168	52	67	34	15	..	185
4. Of Brain, Nerves, etc. ..	131	54	10	24	33	10	130
5. Of Heart, etc.	60	3	13	17	27	..	41
6. Of Respiratory Organs ..	231	115	21	55	72	18	267
7. Of Digestive Organs ..	53	20	8	12	13	..	60
8. Of Kidneys, etc.	20	2	3	8	7	..	16
9. Of Uterus; viz. — Puer- peral Disease, etc.	6	..	5	..	1	..	9
10. Of Joints, Bones; viz.— Rheumatism, etc.	7	5	..	..	2	..	8
11. Of Skin, etc.	5	..	1	1	2	1	2
12. Malformations	3	3	..	..	..	..	4
13. Debility from Premature Birth, etc.	36	34	1	1	..	..	26
14. Atrophy	37	24	..	2	10	1	27
15. Age	63	..	..	..	26	37	55
16. Sudden	7	5	1	..	1	..	9
17. Violence, Privation, etc. .	31	12	3	10	6	..	31
CAUSES NOT SPECIFIED. .	1	2	..	..	..	..	10

THE following are the number of Deaths from Small-pox, Measles, Scarlatina, Hooping-cough, Diarrhœa, and Typhus, in the several Districts of London, for the past Week :—

	Popula- tion.	Small- pox.	Measles.	Scar- latina	Hoop- ing- Cough.	Dia- rrhœa.	Ty- phus.
West.....	376,427	..	8	10	16	2	9
North	490,396	3	8	6	11	2	11
Central ..	393,256	..	2	3	15	1	5
East	485,522	1	4	7	13	3	17
South	616,635	3	4	5	12	6	10
Total..	2,362,236	7	26	31	67	14	52

TO CORRESPONDENTS.

Dr. Jenner's Second Lecture on Skin Diseases will appear next week with a COLOURED ENGRAVING. We hope to continue these lectures on alternate weeks.

lpha.—Hydrogen is the lightest body known, being of the specific gravity 0.069. The common coal gas of the shops is a compound of light carburetted hydrogen, heavy carburetted hydrogen, and more or less of sulphuretted hydrogen. Pure hydrogen gas is not absolutely poisonous. A mixture of hydrogen and oxygen gases may be breathed with safety.

C. D.—There is no royal road to the cure of the disease in question. Consult any respectable Practitioner.

A Nurse.—The milk of the human being differs from that of the cow in containing more sugar and more water. It is, therefore, recommended to add these substances to cow's milk when a child is obliged to leave the mother's breast for artificial nourishment.

POOR LAW MEDICAL OFFICERS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In reference to Mr. Griffin's movement in behalf of Poor-law Medical officers, I beg to suggest that every one who feels himself aggrieved should write to Lord Palmerston before the meeting of Parliament on February 3, and state briefly the amount *per cure* he receives from the Guardians of the Union under his care, and any other matter he may deem desirable. Mr. Griffin's pamphlet addressed to his Lordship prompted me to do so; and I think if others would act on the suggestion, the movement might be greatly advantaged. I am, &c. MEDICUS.

Juvenis.—The best works on Pathological Anatomy are the volumes of Rokitsansky, and that of Drs. Handfield Jones and Sieveking on the same subject.

M. D.—It is not indispensable to possess a University degree to become a candidate for the diploma of the London College of Physicians; but the College requires that sufficient evidence should be adduced of a due amount of preliminary and professional education. Three years must be passed in hospital practice at a recognised Hospital.

B. S.—There is a ward at the Westminster Hospital called the Lithotriptic Ward, containing eleven beds, "set apart," and to be "for ever maintained," "for the reception and treatment of lithotriptic patients;" but, inasmuch as the number of patients so afflicted cannot be brought together at once, two beds only are kept ready for their reception, and the rest are appropriated to general patients. A separate account is kept of the lithotriptic fund, but it is "placed at the disposal of the Governors as part of the Hospital funds."

PREVENTION OF PITTING IN SMALL-POX.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I have to thank you for inserting my humble communication on the prevention of pitting in small-pox by a strong solution of nitrate of silver. My name is Rowand, as you may see it in your list of subscribers to the *Medical Times and Gazette*, and not "Roward," as printed in connexion with the above communication in your Journal.

The above mode of preventing pitting in small-pox will meet with an ample trial in this country. I shall be careful to collect the results for your Journal. I have used a much stronger solution of nitrate of silver than a drachm to the ounce of water, with more ectrotic and antiphlogistic effects. But very strong solutions are apt to vesiculate (which is the only objection), and for that reason I have given in my paper the minimum strength that shall have the effect of preventing pitting. Different skins, moreover, will require different strength. I am, &c.

Quebec, December 31, 1856.

A. ROWAND.

Monkshood.—We cannot insert the letter. Homœopathy does not deserve serious consideration. It is only worthy of ridicule.

Mr. Price Jones's letter did not arrive until after the publication of our last number.

Papers and letters by Dr. Grant, Dr. Arnott, Dr. Sieveking, Dr. Toogood, and Mr. Gay are in type, and a report of the Army Medical and Surgical Society; but they are unavoidably postponed.

A Subscriber from the Beginning.—We believe there is no law to prevent a Member of the College professing Homœopathy from holding a Union appointment.

Mr. Dale's cases are not forgotten.

Excelsior.—A lecture on short-hand would not be adapted to our paper.

Our Correspondent can purchase a very good system for 1s.

A. C.—He cannot charge for the medicines he supplies.

A Country Surgeon.—Next week.

Dublinensis.—The salaries of the Medical officers under the Medical Charities Act were as follow for the four years :—1852, £19,472; 1853, 65,022; 1854, £60,388; 1855, £61,445. The number of cases to which Medical relief was given in 1855 was 732,563.

Mr. Mowatt.—The Royal Dublin Society meets on the first Thursday of the month, at 3 o'clock. The library contains about 22,000 volumes.

E. T.—The illegitimate births in England in 1854 were 6.4 per cent., or 1 in 15 of the total births. The number was—males, 20,978; females, 19,763: total, 40,741. The North-Western counties produce double the amount of illegitimate births as compared with London, and these principally in Liverpool, Wigan, Bolton, and Ashton-under-Lyne.

PALMAM QUI MERUIT FERAT.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In your last paper, Chloroform was represented as a recently discovered agent, of great value in sea-sickness. If your readers will refer to your number for March 5, 1853, page 252, they will find that this valuable remedy has been for several years thus employed. I am, &c.

Ventnor, January 26, 1857.

RICHARD NEALE, M.D.

[Dr. Inman, of Liverpool, recommended chloroform in sea-sickness, and other forms of vomiting, in March, 1853, as Dr. Neale states. It seems also to have been used by a former Editor of this Journal.—Ed.]

COMMUNICATIONS have been received from—

Dr. Sieveking; Dr. Mouat; Mr. Probert; Dr. Maurice Collis; Mr. F. Skey; Dr. Arnott; Dr. Alfred Taylor; Dr. Evans, Carlisle; Dr. Peacock; Mr. Parker; Mr. Waring; Dr. Murray; Mr. Neil; Mr. Frank Powell; Dr. Baines; Mr. Waters; Signor Montemerli; Mr. Reed; Mr. Mann; Mr. Fox; Mr. Maysmor; Mr. J. J. Fox; Mr. Dale; Dr. M'William; An Inquisitive M.D.; Mr. Barlow; Dr. Lucas; Dr. Ridley; Dr. Allen; Dr. Dickson; Mr. T. Davidson; Dr. William-son; Mr. Newman; Dr. Nolan; Dr. Keavin; Mr. Hodson; Mr. Denne; Mr. J. A. Hedges; Dr. C. Smith; Mr. B. Switzer; Dr. Dixon; Mr. J. Smith; Dr. C. M'Carthy; Dr. Oxley; Mr. D. Deveny; Mr. J. Binns; Mr. J. C. Sloan; Mr. J. D. Vernon; Mr. J. Newton; Mr. Fernie; Mr. J. Harrison; Mr. Newman; Mr. H. Russell; Mr. E. Wallis; Mr. A. Dyer; Dr. England; Dr. Johnstone; Mr. J. Kearns; Mr. J. Wilson; Dr. Gilchrist; Dr. Anderson; Dr. Macleod; Mr. Gillard; Mr. M'Dermot; Staff-Surgeon Manifold; Mr. Yeld; Mr. Chippendale; Mr. Way; Mr. Fowler; Mr. Morris; Mr. Wood; Mr. Part; Dr. Peacock.

APPOINTMENTS FOR THE WEEK.

31. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; Westminster, 1 p.m.; King's, 2 p.m.; Charing Cross, 1 p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m.: J. B. Brown, Esq., "On Sterility, its Causes and Treatment." The Election of Committee for selection of Officers at 7 p.m.

ROYAL INSTITUTION, 3 p.m., Professor Phillips, "On the Mean Level of the Sea; its possible variation from probable Causes."

2. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.; Orthopædic Hospital, 3 p.m.

EPIDEMIOLOGICAL SOCIETY, 8 p.m., Dr. Murphy, "On Puerperal Fever"—Continued.

ROYAL INSTITUTION, 2 p.m. General Monthly Meeting.

ENTOMOLOGICAL SOCIETY, 8 p.m.

CHEMICAL SOCIETY, 8 p.m.

3. Tuesday.

Operations at Guy's, 1 p.m.

PATHOLOGICAL SOCIETY, 8 p.m.

ROYAL INSTITUTION, 8½ p.m., Prof. Huxley "On the Sense of Hearing."

LINNEAN SOCIETY, 8 p.m.

4. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m. Orthopædic Hospital, 3 p.m.

ROYAL SOCIETY OF LITERATURE, 8½ p.m.

PHARMACEUTICAL SOCIETY, 8½ p.m.

GEOLOGICAL SOCIETY OF LONDON, 8 p.m.

5. Thursday.

Operations at St. George's, 1 p.m.; Middlesex, 12½ p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.

ROYAL SOCIETY, 8½ p.m.

ROYAL INSTITUTION, 3 p.m.: Professor Tyndall, "On Sound."

ZOOLOGICAL SOCIETY, 3 p.m.

PHOTOGRAPHIC SOCIETY, 8 p.m. Anniversary.

6. Friday.

Operations at the Moorfields Ophthalmic, 10 a.m.; Westminster Ophthalmic, 1½ p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m. Meeting of the Council.

WESTERN MEDICAL AND SURGICAL SOCIETY, 8 p.m.: Mr. Hatfield, "On a Case of Poisoning by Aconite." Council Meeting at 7 p.m.

ROYAL INSTITUTION, 8½ p.m.: Dr. J. H. Gladstone, "On Chromatic Phenomenon exhibited by Transmitted Light."

ORIGINAL LECTURES.

CLINICAL LECTURES
ON
DISEASES OF THE SKIN.

ILLUSTRATED BY COLOURED ENGRAVINGS.

By WM. JENNER, M.D.

Physician to University College Hospital, the Hospital for Sick Children, etc.

LECTURE II.

TO-DAY we have to pass in review some of the diseases included in the order Exanthemata.

ROSEOLA

is a disease of trifling importance, so far as concerns the safety or the suffering of the patient; but you ought to be able to recognise it and to name it, because the patient, or his friends, if he is a child, are usually very anxious about its nature. Moreover, if not familiar with one of its forms, you may think the child affected with *Roseola æstiva*, is suffering from measles, or scarlatina; or, on the other hand, you may suppose the disease to be *Roseola æstiva* when it is the prelude to small-pox.

Roseola is so named from its colour, and is characterised by small rose-coloured spots, or a roseate mottling of the skin.

Species of Roseola.—You must not forget that there is one variety of *roseola* very common in children and young persons of both sexes (hence called by some *R. infantilis*), and especially prevalent in hot weather (and therefore named *R. æstiva*), in which rose-coloured spots and mottling give to the skin an appearance very closely resembling that of measles. From the rash of measles, however, that of *Roseola æstiva* differs, in the absence of a crescentic form or arrangement of the spots,—a character very rarely indeed wanting in measles,—in the very irregular shape of the patches, and in their more rosy and generally paler hue; in their commencing on the most prominent parts of the face and extremities, instead of, as in measles, about the edge of the hairy scalp; in their limitation, not uncommonly, to a small part of the trunk, or to a single limb, and in their irregular course.

Trifling febrile disturbance usually precedes the rash for a few hours, or it may be a day or two, and dryness and redness of the fauces are common. The coryza, so distinctive of measles, is never observed in *Roseola æstiva*; do not forget, however, that now and then the throat is red, dry, and swollen in measles. Still a measles-like rash, accompanied by sore throat, and without coryza, should lead you to suspect the possibility of the case being *Roseola æstiva*. If more than one child in the same family is affected, the probability is in favour of the disease being measles; but, then, I have seen two sisters, after an error in diet, affected at the same time with well-marked *Roseola æstiva*. Sometimes, even when your experience is very large, you will be in doubt whether you have before you a case of *Roseola æstiva* or of measles.

The duration of *Roseola æstiva* is by no means constant. The rash may disappear in twenty-four hours, or it may remain out for four or five days. Occasionally it appears again after having once vanished.

A rose-coloured rash, very similar to that of *Roseola æstiva*, sometimes precedes the eruption of small-pox. It occurs especially at the flexures of the joints. The pain in the head and back and the vomiting which precede the eruption will enable you to suspect the nature of the case, as no such symptoms precede the rash in any other form of *roseola*. Sometimes this variety of *roseola* bears a close resemblance to the rash of scarlet fever, and, if not on your guard, you may make the mistake I once made, and have often since then seen others make, viz., that of sending a patient suffering from *Roseola variolosa* to the Fever Hospital with a certificate that she had scarlet fever.

A similar rash may accompany vaccinia, gout and rheumatism; it may under these circumstances cover more or less of the trunk and extremities, or it may occur in patches. The specific name is derived from the constitutional disease to which the *roseola* is secondary; and so we have *Roseola variolosa*, *Roseola vaccina*, *Roseola rheumatica*. The remaining two varieties of *roseola* differ altogether in appearance from *Rose-*

ola æstiva. Now and then we see in adults, as well as children, and more commonly on the arms than elsewhere, a few rose-coloured circular spots, varying in size from a three-penny piece to a shilling. These spots are not elevated, or only very slightly so, and their colour disappears on pressure. As this affection has been thought to be more common in the autumn than at any other period of the year—though its especial prevalence at that time of year is doubtful—it has been called *Roseola autumnalis*. It is a disease of no importance, and may be unaccompanied by any general or internal local derangement—though occasionally there is a little febrile disturbance, or some dyspepsia. It rarely lasts more than a week or ten days. On the lower extremities, and sometimes on other parts, we observe several rose-coloured rings, varying in diameter from a quarter of an inch to an inch. The colour of the skin within the rings is quite natural. There is no elevation of the discoloured part. The rose-red colour is the only deviation of the skin from its healthy state. You will see, as we proceed, that several diseases of the skin have the same tendency to affect a ring-shape, the part within the ring being, in all respects, healthy. This form of *roseola* is *Roseola annulata*. Like *Roseola autumnalis*, it is usually accompanied by a little febrile disturbance, and runs its course in a few days. Now and then, however, it is a chronic disease, lasting for many weeks.

A warm bath or two—rest—simple diet—and a single dose of mercurial at bed-time, followed by a mild saline alkaline aperient the following morning, is usually all that is required in the treatment of a case of *roseola*. If the patient be an infant, you should not forget to examine the condition of its gums, as *Roseola infantilis* is sometimes the consequence of painful dentition. Should the gums be hot and swollen they ought to be scarified. In the chronic form of *Roseola annulata* the digestive organs are commonly much deranged, and the patient more or less generally out of health. Change of air—mild tonics, such as the mineral acids—and sea-bathing—are the best remedies. At the same time you must be careful to regulate the patient's diet. As the dyspepsia is of the atonic form, a glass or two of wine daily is usually of advantage. This disease is sometimes dependent on uterine disturbance; you should, therefore, always inquire into the state of the uterine and vaginal discharges, and, if need be, correct what is amiss in them.

The eruption proper to typhus fever, measles, typhoid fever, scarlet fever, and cholera, is, in reality, a *roseola*, but differs in important particulars from the varieties I have just described to you. The rash of typhus and of measles as much merits the name of *roseola* as does that which precedes the eruption of small-pox. The mulberry rash of typhus fever differs from the other varieties of *roseola* by its dusky colour and the petechial character of the separate spots as the disease progresses—the exanthem of typhoid fever by the wide separation of its constituent spots from each other, and the papular form of the spots; that of measles by the crescentic arrangement of its spots; the rash of scarlet fever by its punctiform character, its colour, and the extent of surface covered; that of cholera by the size and irregular form of its spots and their tint. All are distinguished by their course, and by the constitutional disturbance which precedes and accompanies them.

It is a fact worthy of remembrance, that I have twice known the dusky *roseola* of secondary syphilis mistaken for the mulberry rash of typhus fever. It can, in some cases, be distinguished only by the general symptoms and by its course; the rash of the two being, at a certain stage and in rare cases, identical in appearance.

ERYTHEMA

is characterized by patches of redness of irregular form, and of rather large size, often somewhat raised above the level of the adjacent skin. The redness disappears on pressure. When at its height the colour of the patch is vivid red; before disappearing the patch assumes a bluish hue. Pathologically considered, there are two distinct kinds of erythema, one having a local, the other a constitutional origin.

Varieties of Erythema having a local origin.—When two folds of the skin overlap each other, the secretions accumulate, and the two surfaces chafe each other; inflammation of the skin is the consequence—Intertrigo, or *Erythema intertrigo*, as it is called—a disease very common in the groins and necks of young children and fat women. A little moisture exudes from the inflamed surface.

The inflammation of the skin resulting from a burn is one variety of Erythema. That peculiar inflammation of the skin which we call a chilblain, is, when dignified by a scientific name, Erythema pernio. When the skin stretched over an œdematous part inflames, as is often the case, the disease is Erythema læve. If the patient lies long on one spot, and the skin over it inflames, it is erythema.

Chronic local erythema is pretty common on the face, around the lips, and on the buttocks of young children. The skin when inflamed about the lips, the orifice of the vagina, the prepuce, and the anus, is peculiarly liable to crack.

Intertrigo is best treated by frequent ablution, bathing the inflamed surface with an astringent wash,—a solution of acetate of lead is one of the best—and then, after drying the part, carefully dusting it with an absorbent powder, such as starch powder, or oxide of zinc. It is important to bear in mind, with reference to Erythema læve, that the inflammation of the skin increases the œdema of the subcutaneous tissue. You must remember the man Dobney, who lately was an in-patient in Ward 4, suffering from Bright's disease—his legs were œdematous, the left leg was the seat of Erythema læve, and the consequence was that the œdema of that leg was infinitely greater than that of the opposite. The application of a solution of nitrate of silver, twenty grains to the ounce, cured the erythema, and as that improved the œdema of the leg diminished, until the two legs were of the same size. If, as is usually the case, it is the lower extremities which are the seat of Erythema læve, they should be raised so as to favour not only the return of blood from the limbs, but also the draining of the serosity out of the tissue, the skin covering which is inflamed. A few punctures in the thigh with a fine needle, by permitting the escape of serosity from the cellular tissue, will aid in the cure of the erythema. If the œdema be not reduced bullæ sometimes form on the erythematous surface, and finally the skin ulcerates or even sloughs. As to the erythema from pressure, that is best treated by careful drying of the part after washing, the application several times a day of spirit of wine, or an astringent solution, as alum, but above all, by the greatest attention to cleanliness and frequent change of position. Do not forget that a sore back from pressure very rarely occurs in fever or paraplegia—the diseases in which it is most common—if the patient be well nursed.

Varieties of Erythema of constitutional origin.—The local disease in these varieties of erythema, although characterized by redness, etc., hardly merit the name of inflammation, unless we give to that vague word a very wide signification.

Erythema fugax is distinguished by the sudden appearance of large red patches, and their as sudden disappearance after a time, varying from a few minutes to a few hours. The patches of Erythema fugax are more common on the face than elsewhere; not infrequent on the trunk; rather rare on the extremities. The usual cause of Erythema fugax is some article of diet. I know a gentleman who never takes vinegar without one or more blotches of Erythema fugax appearing on his face in the course of a few minutes. The patches disappear in less than half an hour. That Erythema fugax results in some cases from nervous influence, is rendered probable by such facts as this:—A gentleman with whom I am acquainted cannot even think of heating condiments without experiencing a sensation of heat in the face, forehead, and scalp, conjoined with some redness of the part.

Such of you as have attended in the out-patients' room, must frequently have seen there young girls from 6 to 12 years of age, on the front of whose legs were oval patches, of a red colour, about an inch or an inch-and-a-half in length, slightly but decidedly elevated, and rather tender to the touch. You may remember also a woman of 55, an in-patient in Ward 3, under my care, on whose legs were similar patches; and there is now in the same ward a young woman, about 22 years of age, affected in the same manner. The disease is Erythema nodosum. It is a disease which the artist has some difficulty in rendering faithfully, at least I judge so from the many published drawings on the table, not one of which gives you a very faithful representation of the disease, as you may yourselves see by comparing them with the case in the ward. Mr. Tuson made me three drawings before he succeeded to my satisfaction. His drawing has been copied in coloured lithography, and will accompany this lecture in the *Medical Times*. The eruption of erythema is usually preceded for a few days, about a week more or less, by a little general febrile disturbance. You cannot tell what is about to happen, for there is

nothing characteristic in these febrile symptoms. Each patch of Erythema nodosum lasts from four to nine or ten days; fresh patches appear every day or two. The disease is commonly finished in a fortnight or three weeks. Now and then, however—and this is especially the case in persons past the middle period of life—it runs a chronic course. Fresh patches appeared on the legs of the elder of the two women in Ward 3, from time to time, for two months.

On their first appearance, the colour of the patches is tolerably bright red; but when about to fade, the patches assume a bluish or violet tint. Exposure to cold also gives to the erythematous patch the same hue. This bluish colour is very characteristic of erythema. Over the anterior aspect of the tibia, which is the ordinary seat of Erythema nodosum, the patches are commonly oval, their long axis being from above downwards; about the knee-joint, and at the back of the leg, they are usually circular. On the upper extremity, where they appear in rare cases only, they are also circular. The oval patches are from $\frac{3}{4}$ to 2 inches in length, the circular patches from $\frac{1}{2}$ to 1 inch in diameter. On the lower extremities they are rarely seen much above the knee, nor on the upper extremities above the elbow. In one case only have I seen any patches on the trunk.

Occasionally, several patches are evolved in the vicinity of each other, and their margins coalescing, a broad red patch is formed, here and there hard, elevated, and very tender. This was the case on the anterior aspect of the young woman in Ward 3. If you bear in mind the two following facts regarding this patient, you will never confound Erythema nodosum with any other affection. On admission, one of the patches near to the knee was surrounded with a black ring, from the application of nitrate of silver; the disease had been taken for erysipelas. Now, the redness of erysipelas terminates by a well-defined line, that of erythema shades off into the hue of the adjacent skin. The margin of an erysipelatous patch is as much raised as its centre; the elevation of a patch of Erythema nodosum ceases by degrees with the redness. When the finger is passed over a patch of Erythema nodosum, it feels as though the hardness were caused by something buried under as well as in the skin. Erysipelatous hardness is brawny in character and superficial. When several patches of Erythema nodosum are present, you can hardly confound the disease with erysipelas. The second fact is, that I asked one of you what should be done to the most prominent patch on the same woman's leg, and, after touching it, he remarked: "There is fluctuation; I would put a lancet into it." To have done so would have been a terrible blunder. You will not, then, forget the fact that the largest patches of Erythema nodosum now and then convey to the finger a sensation of fluctuation; but they never suppurate, and the sensation of fluctuation is probably due to the presence of serosity in the subcutaneous cellular tissue. Be careful, then, not to confound a patch of Erythema nodosum with phlegmonous inflammation of the cellular tissue.

When patches, agreeing in other points with those I have described as characteristic of Erythema nodosum, do not exceed a fourpenny-piece in size, the disease is called Erythema tuberculatum; when not larger say than a very small split pea, the disease is called Erythema papulatum. Sometimes circumscribed patches of a bright red colour, studded with deeper coloured points, which to the eye resemble papulæ but are without the elevation and hardness of true papulæ, appear on the arms, neck, and breast; the colour and slight elevation are both temporarily removable by the pressure of the finger. To these patches, also, the term Erythema papulatum has been applied.

There is only one other form of erythema to which I need direct your attention, viz., Erythema circinnatum. Some of you probably saw the woman from whom this excellent model was taken, at my request, by Mr. Tuson. She was suffering also from acute rheumatism, for which she was under Dr. Garrod's care when the eruption appeared. Note that at places, the patches are perfectly ring shaped, at others the rings are incomplete, and here and there two or three rings have coalesced. The rings are red, distinctly raised, terminate abruptly externally, both as regards their colour and elevation, but shade off gradually towards the centre. Within the ring the skin has a faintly yellowish tint. The breadth of the red ring is about $\frac{1}{3}$ inch. The patches are quite smooth; there is not a trace of scales, vesicles, or scabs on their surfaces. The colour of the rings of Roseola annulata is

darker than that of *Erythema circinnatum*, the elevation is scarcely perceptible, the outer margin is not abrupt, and the centre is the colour of the natural skin, instead of yellowish. *Erythema circinnatum*, or *annulatum* as it is sometimes called, ordinarily supervenes, as it did in this case, in the course of an attack of acute rheumatism, the seat of the disease being, as in this case, the trunk. It is by no means a common affection. When acute, it runs its course in about a fortnight or three weeks. There is a chronic variety, however, in which the rings are incomplete, and to it the name of *Erythema marginatum* has been applied. Willan mentions that it occurs on the extremities and loins of aged persons suffering from internal disorders, and that its occurrence is an unfavourable sign.

A little desquamation of the cuticle covering the red patches follows the disappearance of all the varieties of erythema and roseola. The eruption of roseola itches slightly, that of erythema usually itches, burns, or tingles, in a trifling degree.

If we now cast a glance over the diseases I have to-day described to you, it is evident that there is little or no real difference between roseola and erythema; that excluding inflammation of the skin, dependent altogether on local causes, and that variety of roseola which so closely resembles measles, the other varieties of roseola and erythema might well be grouped together into one genus, and this whether regard be had to their local or general pathology, or to their treatment.

A few warm baths, rest, mild aperients, simple salines, and a light diet, so long as the skin is hot, the pulse quick, and the tongue white: attention to the digestive organs, mineral acids, and vegetable tonics, after the febrile disturbance has ceased, these are the remedies for all. *Erythema nodosum*, *tuberculatum* and *papulatum*, and the chronic variety of *erythema circinnatum*, usually occur in delicate persons, and in their treatment quinine is said to be particularly useful. Dr. Thompson, whose remarks on treatment are always worthy of attention, found bark in many cases much more beneficial than quinine. In women past the middle of life, the eruption of *Erythema nodosum* is thought to be connected with the cessation of the menstrual discharge. For the cure of the ease of *Erythema circinnatum*, to which I have referred, in Ward 7, nothing special was prescribed. She was treated for the acute rheumatism only, and the eruption disappeared spontaneously soon after the model was taken.

LECTURES

ON

GENERAL NATURAL HISTORY.

By THOMAS H. HUXLEY, F.R.S.,

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LECTURE X.

THE principal characters by which the *Articulata* are distinguished from the *Annuloida* have been pointed out in a previous Lecture. Of the four groups which constitute this immense division of the Animal Kingdom, the *Insecta*, *Myriapoda*, *Arachnida*, and *Crustacea*, the last is that to which I shall principally direct your attention; for, although insignificant if compared numerically with the *Insecta*, it is of equal, if not greater importance to the philosophical naturalist, from the manner in which its members, while constructed upon a constant plan, vary in detail; from the readiness with which their structure and development may be studied; and from their consequent fitness to serve as illustrations of all the great doctrines of Morphology.

The *Crustacea* may be defined to be, those *Articulata* which, whenever respiratory organs are specially developed, possess branchiæ, and not tracheæ. By this definition they are at once separated from all insects and myriapods, which invariably possess tracheæ. But it remains a difficulty, if it be not altogether impossible in the present state of science, to frame any definition which shall similarly include all *Crustacea* and exclude all *Arachnida*. In both classes, in fact, there are forms which possess no special respiratory organs; and if in these cases we resort to other characters, none which are of universal application have as yet been discovered.

It may be said, however, that, as a rule, these exceptional *Crustacea* possess more than four pairs of locomotive appendages, have two pairs of antennary organs, and possess a simple

alimentary canal; while the *Arachnida* generally, have not more than four pairs of locomotive appendages, possess at most one pair of antennary organs, and have their alimentary canal produced into cœca.

I shall speak of the *Crustacea* under nine heads, corresponding with the nine principal groups into which, as it appears to me, all the species may be naturally arranged. These are:—1. The *Podophthalmia*. 2. The *Branchiopoda* (*Phyllopoda* and *Cladocera*). 3. The *Edriopthalmia*. 4. The *Copepoda* (including the *Siphonostomata*). 5. The *Ostracoda*. 6. The *Cirripedia*. 7. The *Xiphosura*. 8. The *Trilobita*. and 9. The *Eurypterida*. Whether these groups are further reducible, whether they are or are not mutually equivalent, and what is the arrangement which would most nearly indicate their natural affinities, are questions which cannot be discussed here; but, whatever views may be entertained on these points, it is quite certain that these nine groups must always be regarded as so many well-marked modifications of the Crustacean plan.

It is most convenient to commence the study of the *Crustacea* with the *Podophthalmia*, and among these there is perhaps no species better fitted to serve as a type than the common freshwater crayfish, *Astacus fluviatilis*, specimens of which are easily procurable, and should be in the hands of those who desire to follow the description of its structure which I am about to give. It will be observed that the upper and anterior portion of the dense and more or less calcified exoskeleton, which covers the body of this Crustacean, has the form of a large expanded, shield-like plate, the "carapace," produced into a strong "frontal spine" between the eyes, and bent down at the sides so as to reach the bases of the legs. The posterior division of the body, on the other hand, presents a very different aspect, being divided into seven distinct movable rings or segments. This is called the "abdomen," while the anterior division covered by the carapace is universally admitted to correspond with the head and thorax of other *Articulata*, and receives the name of "cephalo-thorax."

On turning to the ventral surface of the crayfish, a great number of limbs or "appendages," twenty pairs in all, are seen to be attached to the cephalo-thorax and abdomen, six pairs belonging to the latter, and fourteen pairs to the former region of the body.

The six pairs of abdominal appendages are commonly known as the "false" or "swimming" feet; and it will be observed that they are attached to the six anterior segments of the abdomen only, the seventh being unprovided with any such organs. Of the fourteen pairs of cephalo-thoracic appendages, the five posterior are called the "ambulatory" legs, being the organs by which the crayfish is enabled to walk. Strictly speaking, however, the anterior of the five pair is not more ambulatory than prehensile, being so modified as to constitute the great claws or "chelæ."

Of the six next pairs of appendages, passing from behind forwards, five are not at first sight apparent, the posterior pair, which are applied over the mouth and cover the others, being alone visible. These and the two pair which lie immediately under or in front of them, are called "maxillipedes," or "foot-jaws." The next two pair, delicate and foliaceous, are termed "maxillæ;" while beneath, or rather in front of them, are two strong, toothed organs, the "mandibles." To these, the maxillæ and the maxillipedes, M. Milne Edwards applies the collective term of "gnathites."

The remaining three pair of appendages occupy the sides of the fore-part of the cephalo-thorax, in front of the mouth. The most posterior pair are the long feelers, or "antennæ;" the next are the short feelers, or "antennulæ;" while the most anterior pair are the moveable stalks, which support the eyes upon their extremities; the "ophthalmic peduncles," or "ophthalmites."

To come to an understanding of the composition of this complex body, with its multiform appendages, we must first detach and study carefully one of the abdominal segments—say the third. Such a segment is nearly semicircular in vertical section, the dorsal wall, or "tergum," being very convex, and where it reaches the level of the almost straight ventral wall, or "sternum," sending down a flattened lobe, which is reflected at its free edges into a corresponding prolongation of the ventral wall, so that each infero-lateral angle of the segment is prolonged into a hollow process, which may be conveniently termed the *Pleuron*. Near the outer extremities of the straight ventral portion of the segment two rounded articular cavities, which receive the basal joints of the ap-

pendages, are situated. A transverse groove will be seen on the tergum, separating rather more than the anterior third of its surface, as a smooth, convex, lenticular facet, which is completely overlapped by the posterior margin of the preceding segment, when the abdomen is extended, and is left uncovered only in complete flexion. We may term this the "tergal" facet. A corresponding flattened and rather excavated surface upon the anterior half of the pleuron, which is similarly overlapped by the preceding pleuron, may be termed the "pleural facet."

FIG. 1.



Astacus fluviatilis.—A. Mandible. B. First maxillæ. C. Second maxillæ. D. First maxillipedes. E. Second maxillipedes. F. Third maxillipedes. G. Ambulatory leg. H. Appendage of first, and I. of second abdominal somite in the male. K. Appendage of third abdominal somite. L. Sixth abdominal somite, with its appendages and telson. a, b. Endopodite. c. Exopodite. d. Epipodite. e. Setaceous filaments attached to exopodite. x. Tergum of sixth abdominal somite. y, z. The two divisions of the telson. In A, d marks the tendon of the abductor muscle, and in K the joints of a, b, and c are not sufficiently numerous. M. Transverse section of half a thoracic somite (a). b. Coxopodite. c. Basipodite. d. Ischiopodite. h. Branchiferous epipodite. f, g. Branchiæ. e. Filiform appendage. N. One of the branchiferous epipodites a. Its point of attachment. b. Basal enlargement. c. Branchial filament. d. Terminal lobes.

The appendages of the segment (Fig. 1. K.) are very simple, consisting of a cylindrical basal portion, divided into two joints, a shorter proximal, and a longer distal, to the latter of which two terminal many-jointed filaments are articulated. The inner of these is distinguished from the outer by possessing a more elongated and wider basal joint. The whole basal division of the appendages may be termed the "Protopodite;"

while for the internal and external terminal filaments we may adopt M. Milne Edwards's names of "Endopodite" (a b) and "Exopodite (c);" and I shall use these terms to indicate the homologues of those parts, in whatever region of the body we meet with them.

The abdominal segment, then, or, as I will hereafter term it and its homologues, "somite," is composed of a tergum, two pleura, and a sternum; but it must be remembered that these terms rather indicate regions than anatomical elements, the whole segment being continuously calcified, and no sutures or other absolute demarcations separating one portion from another. Furthermore, the somite carries two appendages, each divided into a proximal portion or protopodite, terminated by two branches, the endopodite and exopodite.

Now the whole exoskeleton of the *Astacus*, however various may be the appearance of its different parts, consists of somites and appendages essentially similar to those which have just been described, but which are more or less masked by the connation, the coalescence, the abortion, or the extreme modification of their primitive elements.

If, in the first place, we follow out these modifications in the posterior somites, we find the fourth, fifth, and sixth abdominal somites to be, in all essential respects, similar to the third; but the appendages of the sixth (L) are singularly changed, the protopodite being represented by a single strong, short joint, and the exopodite and endopodite having the form of wide oval setose plates. The exopodite is again divided into two portions by a transverse joint. The seventh division of the abdomen (L y z) is usually regarded as the homologue of any of the other segments, and, therefore, as a somite; but, as we shall see by and by, the justice of this determination is at least doubtful, and I shall, therefore, term it the seventh abdominal segment merely, or (to use a good word proposed by Mr. Spence Bate), *telson*. As we have seen, this telson bears no appendages; dorsally it is completely calcified, but is divided by a transverse suture into two portions, the posterior of which is moveable upon the other; ventrally, on the contrary, it is only the posterior part which is fully calcified, the middle of the anterior portion, in which the anus is situated, being completely membranous, and the sides only being strengthened by calcareous plates extending inwards from the dorsal *sclerodermite* (a).

The powerful tail-fin of the *Astacus* is formed by the telson combined with the two distal divisions of the sixth abdominal appendages on each side. The other abdominal appendages can have very little influence on locomotion. In the female, however, they play an important part, as the carriers of the eggs, and in this sex there is nothing worthy of special notice about the first and second abdominal somites or their appendages, except that those of the first are rudimentary. In the male, however, the appendages of two somites have undergone a very interesting metamorphosis, whereby they are fitted to subserve copulation. Those of the second somite (I) are enlarged, and the protopodite and basal joint of the endopodite are much elongated—the latter being produced internally into a moveably articular plate rolled upon itself, so as to be concave outwards and forwards. It is as long as the rest of the endopodite (which like the exopodite is many-jointed) and serves as a sort of sheath for the reception of the appendage of the first somite (H) which consists of a single plate rolled upon itself in a similar manner, so as to resemble a style. These organs, doubtless, help to convey the semen from the male genital apertures to the vulva of the female.

The compact and firm cephalo-thorax seems at first widely to differ from the flexible, many-jointed abdomen; but the most posterior of its somites offers an interesting transition from the one to the other. This somite is, in fact, only united by membrane to that which precedes it, and is hence to a certain extent moveable. Its sternal portion is completely calcified, but the "epimera" (b) are but partially calcified, and only united by membrane to those in front.

The appendages of this somite differ widely from those of the abdomen, representing (as their development shows) only the protopodite and endopodite of the latter. Each is a long firm leg, composed of seven joints, the proximal one being thicker

(a) This convenient term was introduced by M. Milne Edwards to denote any independently calcified element of the exoskeleton.

(b) I apply the term epimeron in a more special sense than that commonly used, to denote that part of the lateral wall of a somite lying between the articulation of the appendage and the pleuron.

than any of the rest, while the terminal joint is narrow, curved and pointed (G). To these seven joints M. Milne Edwards has applied the following terms. The proximal one articulating with the somite is the "coxopodite" (1), the next small and conical, is the "basipodite" (2), the third cylindrical, short, and marked by an annular constriction, is the "ischiopodite" (3). Next comes a long joint, the "meropodite" (4), then the "carpopodite" (5) and "propodite" (6), and finally the terminal, "daetylopodite" (7)."

(To be continued.)

ORIGINAL COMMUNICATIONS.

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No. XXIX.

CASES OF PNEUMATOSIS

OCCURRING IN PATIENTS THE SUBJECT OF TYPHOID FEVER.

By JEFFREY A. MARSTON, M.D.

Staff Assistant Surgeon.

AMONG the cases treated at the Malta Military Hospital, we had many of typhoid fever; and two cases occurred, in one of which, unquestionably, a gas was developed in the blood during life. Unfortunately, I have to trust to my memory, having only noted the circumstance among the various Medical notes preserved.

The first case noticed occurred in a private of a line regiment, suffering from typhoid fever, with the characteristic abdominal symptoms. He had been thirteen days in Hospital, and was evidently sinking. The Surgeon who attended him observed, in the afternoon visit, that the left side of the neck, and greater portion of the thoracic parietes, appeared much swollen, and upon pressure they were found to be distinctly emphysematous. Having been called to the patient a few days previously, the Surgeon was able to state positively the absence of this affection then. The man died about five minutes after the first observance of this symptom; and, upon examination, it was discovered that air was mixed with the blood of the venous system generally, existing in the right side of the heart, liver, hepatic and portal systems, renal system, spleen, and the viscera generally. The lungs were most carefully examined, and no trace of rupture could be found anywhere; but they were emphysematous (the lobular variety), about their margins and apices. No gas existed in the pleural sacs, nor in the pericardium. The tumour over the chest and neck was plainly emphysematous and crackling, and easily reduced by multiple punctures. The bowels were tympanitic. The other pathological appearances were those of typhoid fever, viz., softening of the spleen, ulceration and enlargement of Peyer's glands, some injection of the mesenteric glands, a very fluid condition of the blood, and a softened and uncontracted condition of the left ventricle of the heart.

The second case occurred in a private of the East Kent Militia, stationed at Malta, aged 20, admitted with all the symptoms of typhoid fever, who died of that disease on the 9th of September, 1856, after being eleven days in hospital. During life he had a well-marked rubeoloid eruption, symptoms of ulceration of the ileum, with hypostatic pneumonia. About forty minutes before death he used a bed-pan, and it was noticed that his body about the neck and chest appeared enlarged, and "cracked" on pressure. He had used no exertion, nor any straining. The post-mortem rigor ensued, as usual, quickly after death, and was slight. He died at three a.m., and his body was examined at half-past twelve p.m. same day, nine hours and a half after death. The weather was not remarkably warm, and the body had not undergone the slightest decomposition. The external surface about the chest and lower part of the neck was occupied by a diffused tumour of a clearly emphysematous nature; and, as in the other case, the swelling gave exit to air by puncture, more or less subsiding at the same time. Upon raising the sternum, it was found that the lungs were emphysematous, not collapsing much by the pressure of the external air. The pericardium was distended with air completely; the left ventricle, and no portion

of the arterial septum contained any; but the right side of the heart was distended. Air existed also in the pulmonary artery; none was found in the pulmonary veins. The lungs were much congested at their base, probably chiefly the result of position, but no false emphysema, or rupture of the pulmonary tissue existed anywhere. The jugulars also contained air. The blood was frothy in the hepatic venous system, from admixture with a gas; but no air appeared to exist in the portal system. The veins of the spleen and kidneys also contained air: both the venæ cavæ contained air; indeed, this condition was general to the venous system. Tympanitic distension of the abdominal viscera existed also. The lesions were those of typhoid fever, as enlargement and ulceration of Peyer's glands, similar exactly to the last case.

J. P. Frank describes some similar cases, but does not, that I am aware, hazard any opinion as to the pathological cause of its production. Dr. G. O. Cless, in an interesting paper on the pathological development of gas in the blood, has collected thirteen cases—two observed by himself—of typhoid fever, apparently identical with our own cases. Sudden death occurred in all the cases he has narrated.

This pathological condition, in every case hitherto recorded, has been confined to the venous system. After enumerating the various sources from which it might arise, he concludes that it is spontaneously developed from the blood itself, and proposes to term it "Pneumothomia." The death was not sudden in the last case narrated by us.

ON CONGELATION AS AN ANÆSTHETIC

IN OPERATIONS PERFORMED WITH THE KNIFE OR CAUSTIC.

By JAMES ARNOTT, M.D.

THE following observations form an appendix to those inserted in the *Medical Times and Gazette* of November 1, upon the subject of anæsthesia in surgical operations; and in reference, particularly, to the problem, How insensibility can be produced without endangering the life of the patient. (a)

That a momentary application of intense cold will completely prevent pain in a large number of operations, is a fact now, I believe, universally admitted by Surgeons; but there is, nevertheless, still a very general idea that the measure is too imperfect to answer as a substitute for chloroform, except in a few instances. It is still objected to by many, on account of one or other of the following reasons:—That it is uncertain in its anæsthetic effects, very limited in its applicability, itself a cause of pain, the cause of untoward effects, and troublesome in its application. The purpose of the present paper is to remove these objections, by supplying the requisite information; and, for the sake of clearness, they will be stated in the form of questions, and separately considered:—

I. Is congelation certain in its effects; can it always be depended upon?

When properly employed, it has never failed; and it is so easily employed, that few instances of failure from mistakes in the manner of using it have occurred. A multitude of reports of the excision of small tumours under congelation have been published by M. Velpeau, and others, in which the patients experienced little or no pain; and when the skin and subcutaneous tissue only are involved in the incision (which is the case in the great majority of surgical operations), complete anæsthesia may be depended upon with absolute certainty. It is necessary to observe, however, that when the part about to be cut is inflamed, the frigorific must

(a) In the present communication attention will be given exclusively to congelation as an anæsthetic; but I may take the opportunity of stating that, though I am myself perfectly satisfied with the amount of statistical information on the subject of the effects of chloroform on operations furnished by the accurate reports in the *Medical Times and Gazette*, and others referred to in my former paper, it is still very desirable that this statistical research should be extended. Unfortunately, the records in many Hospitals will not furnish this information, as appears from the following extract of a letter, with which I have been favoured, in answer to an application I had made, and which notices another insuperable difficulty in this respect—viz., the cessation of the general use of chloroform. The Hospital referred to is one of the largest in the provinces, and the birth-place of many important surgical improvements:—

"I have been making inquiries, and find that no regular account was kept in this Hospital of operations performed before 1852; so I am afraid I cannot supply you with the information you wish. I was much interested with your papers on chloroform, affecting the mortality from operations; for we have held the same opinion here for two or three years, and have acted on it; so that chloroform is never given in primary operations after accidents, never in lithotomy, and in other surgical diseases generally, only at the request of the patient."

be applied for a longer time than is usual, or consist of more powerful materials than ice and common salt. This is shown by a series of operations under congelation in the practice of M. Coste, Director of the Medical School at Marseilles, and published in the *Union Médicale* for September, 1855.

As illustrative of the certainty of success with which congelation may be used, I will adduce extracts from cases reported in the United States' journals, as the English reader may not have already met with them.

Dr. Warren, of Boston, relates in the *Boston Medical Journal* for February, 1855, the employment of congelation in "a large congenital naevus, situated over the knee-joint, with a supplementary tumour extending into the adjacent cellular membrane, and attaching itself to the synovial capsule. The whole tumour was sensitive in the highest degree, rendering it difficult to make a satisfactory examination; and it was at times so painful as to render the patient unable to attend to business. Excision being objectionable, on account of the relations of the tumour to the surrounding organs, a frigorific mixture of equal parts of ice and salt was, by means of a gauze bag, applied for four minutes, when the whole of the tumour became congealed, and of a white colour, crackling under the touch. A narrow-bladed knife was then introduced beneath the skin, and the tumour freely cut up in every direction. The operation was entirely painless, the patient sitting up and watching its progress with much interest, although previously shrinking on the mere approach of the finger to the part. The above subcutaneous operation was repeated once or twice, and resulted in the absorption of a large portion of the tumour, and entire relief of the morbid sensibility." It is stated in this communication that, "in one or two cases of operations involving vascular tumours, Dr. Warren had found it of much service to apply the freezing mixture during the progress of the dissection, and thus temporarily arrest the hæmorrhage, so as to allow of a more satisfactory prosecution of the subsequent steps of the operation."

In the *Charleston Medical Journal* for 1855, among numerous other cases, the following is related:—"On January 25 the freezing mixture was placed in a long and narrow bag of gauze, and carried round the neck of a lipoma, about the size of a man's head, which hung from the back of a negress. The solidification of the skin and subcutaneous adipose tissues was complete in four minutes, and the tumour extracted with so little pain, that the patient was quite surprised when the operation was completed. She declares that she suffered most during the application of the stitches and adhesive straps." "In all these cases adhesion by the first intention was complete, and in none did the patient complain of any pain during or after the application of the freezing mixture."

It was my intention to adduce another and more interesting case, inasmuch as the tumour was large and required more dissection, inserted in the July number of the *American Journal of Medical Science* for 1856; but, as I find the narrative too voluminous for the space I can occupy on the present occasion, I shall merely refer the reader to it. Congelation was deemed peculiarly valuable on this occasion, from its preventing a hæmorrhage which the reduced condition of the patient could ill endure.

(To be continued.)

AN ACCOUNT OF PROFESSOR DUMREICHER'S NEW APPARATUS FOR THE TREATMENT OF OBLIQUE FRACTURES OF THE LOWER EXTREMITIES.

By CARL BADER, M.D.

The following experiments will give the nucleus which led to the construction of this apparatus.

If an extremity of the weight of twelve pounds, and articulated to the pelvis, is laid on a plane surface, it will require the traction of eighteen pounds to move it on that plane. An extremity amputated at the middle of the thigh, and weighing eight pounds, requires seven pounds and a half. A leg amputated below the knee-joint, weight four pounds, requires

three pounds and a quarter. The lower third of the leg, weight three pounds, requires one pound and a half.

Now the resistance caused by muscular contraction is in the greater number of fractures still more considerable than the resistance caused by friction.

The new apparatus tends therefore—

- To diminish as much as possible the friction the extremity opposes to the extending power; and
- To use the weight of the lower fragment for extension.

The original apparatus, fig. 1, consists of a hollow tin-splint, adapted to the back of the leg and knee, and of a foot-piece appended to it, *a, a, a*, to which are fixed four steel supports, *b, b, c, c*, terminating in four wheels, *d, d, d, d*; these move on two well-polished rails, *f, f*, attached to an inclined wooden plane, *g, g*.

Several fractures of the leg and four fractures of the femur were satisfactorily treated with the apparatus. The tin-splint, *a, a, a*, was made to reach at the inside to the tuber ischii, at the outside to the trochanter major, flannel bandages being applied as far as the upper third of the thigh.

But if the tin-splint, *a, a, a*, adapts itself only to the length of the lower fragment, then the upper, being unsupported, comes to stand in an angle with the lower one, and if it has the length of the entire fractured extremity, then the friction between the upper fragment and the splint forms an essential impediment to extension, the more so the shorter the lower fragment is: these reasons made the more complicated construction of apparatus, fig. 2, necessary. It is represented as adapted to a fracture somewhat below the middle of the thigh.

It consists of a tin-splint with a foot-part, 1, 1, 1, for the lower fragment, and a shorter tin-splint, 2, 2, for the upper fragment. Splint 1, 1, 1, is supported by two steel bows 3, 3, and these, fixed on the four stands, 4, 4, 4, 4, rest on the staffs, 5, 5, to which they are attached by screws, 6, 6. These move in the outer wall of a capsule into which the stands, 4, 4, 4, 4, terminate, and by which they are immovably fixed to the staffs, 5, 5.

Splint 2, 2, which is to receive the upper fragment, is also supported by two steel bows, 7, 7; these rest on four stands, which terminate in wheels, 8, 8, which move on the staffs, 5, 5. The remainder is constructed as fig. 1, excepted that, instead of the splints, the staffs, 5, 5, rest on the supports, 9, 9, 9, 9; these are united by steel bows, 10, 10, as also are the staffs, 5, 5. To the convexity of each bow a ring is attached, through which a rod, 11, 11, moves; these rods are intended for the direction of the wheels. The angle of inclination of the wooden inclined plane is from 5° to 6°.

Splint, 2, 2, prevents nearly all friction of the upper fragment, the lower one is fixed up to the point of fracture by flannel-rollers to 1, 1, 1. For fractures of different length we require corresponding splints. In fractures of the neck of the femur the splint, 1, 1, 1, has the length of the entire extremity; in other fractures it has the length of the lower; splint 2, 2, that of the upper fragment.

I have employed the apparatus during eighteen months; it has been tried on all kind of people, and on all kind of cases.

The fourth part of the mattress, which corresponds to the injured part, must be removed, and replaced by the apparatus; it must be firm; the part the pelvis rests upon is to form an inclined plane, the highest point of which looks towards the apparatus. This gives the trunk a fixed point; any displacement downwards would diminish the extension and fatigue the patient. If the upper fragment is drawn outwards, then we bring the apparatus with the lower fragment in the same direction. If a fracture of the middle of the thigh has a direction from before and below, upwards and backwards, then the patient is brought into a half sitting position, so as to bend the hip-joint, and to diminish the resistance of the flexor muscles. Splint 1 and 2 must be well padded with wadding. At the place corresponding to the heel, a piece 2 inches long, 1½ wide, is cut out of splint 1, 1, 1; this space must be as well padded as the remainder. If the soft parts are not wounded, the padding is done so as almost to surround the limb, because the more points of contact the extremity offers to the apparatus, the more complete the effect of the part. If the parts about the heel become painful, the foot part of splint 1, 1, 1, must be padded with common flannel. A flannel roller, lined with cotton, covered with fine linen, is once carried round the ankle (small incisions made in its edges to prevent undue pressure), and to each side of the

roller a piece of flannel is attached, which pieces are tied to the foot part of splint 1, 1, 1.

Increase or decrease of extension is effected by changing the angle of inclination of the plane, and by attaching weights, if necessary.

The improved apparatus hardly requires weights, excepting, perhaps, in strong individuals, where from 8 to 14 ounces are sufficient; the weight of the apparatus and that of the lower fragment effect the extension.

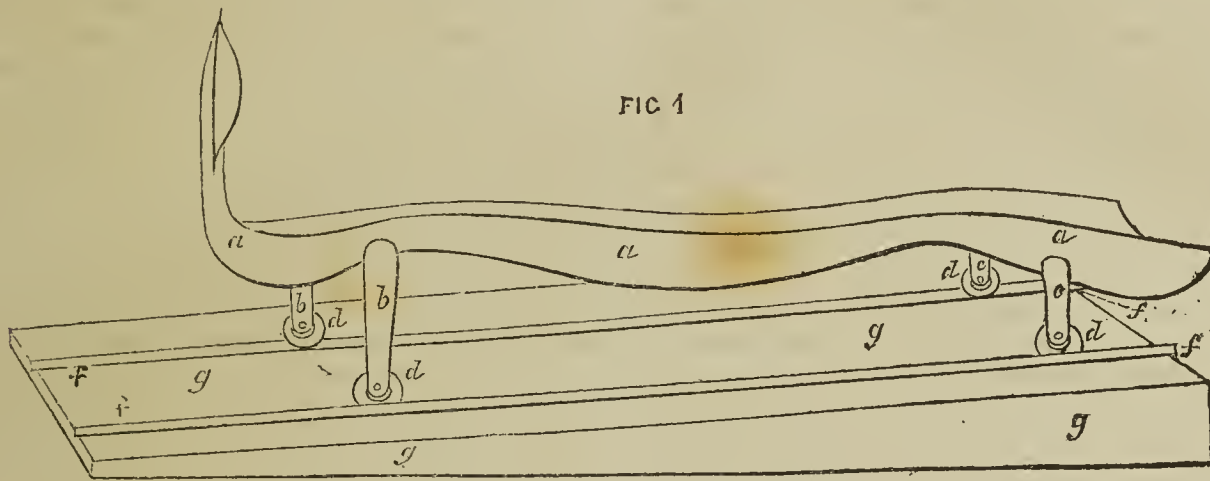
Extension may become injurious, if we increase the angle

of inclination too much, by causing inflammation of the soft parts or friction of the heel.

The peculiar stiffness of the muscles round the fracture makes me apply extension moderately during the first days after the injury, increasing it to the full extent when the muscular contraction has subsided, adding weights if, after some time, the normal length has not been restored.

The deviation of the fragments out of the normal axis requires, according to the case, proper bandaging.

The one object of the apparatus is the continued mainte-



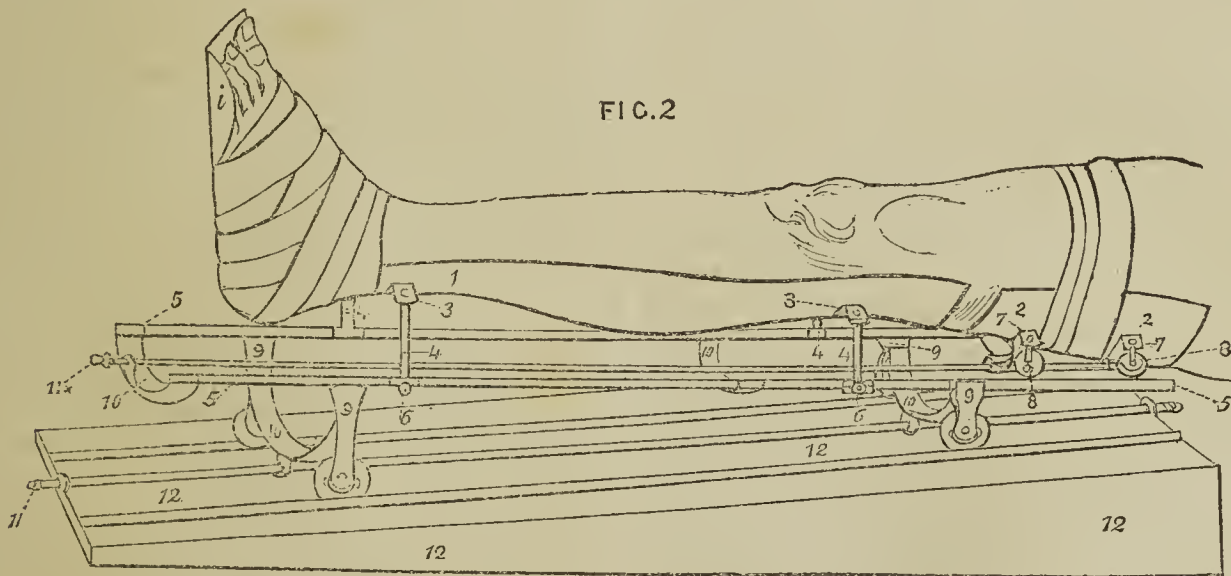
a, a, a. Tin splint and foot piece.—b, b, c, c. Steel supports.—d, d, d, d. Four wheels.—f, f, f. Rails.—g, g, g, g. Inclined wooden plane.

nance of the fragments in close apposition. The other one is the union of oblique fractures without shortening; this has been accomplished in most of the cases, and diminished to a great extent in the less successful ones.

Change of position from the recumbent to the sitting makes the apparatus move on the rails; the fracture is not influenced by the movements of the trunk. For defecation, the patient brings the pelvis on the edge of the mattress, the apparatus, following this movement, discontinues not a moment its

extending action. These movements on the rails show the frequent occurrence of displacements in other modes of treatment, the suspension apparatus for fractures of the leg excepted.

The horizontal position (leg and heel under an inclined angle of 5° , being even higher than the thigh) relieves the circulation. The extending force is equally distributed. The joints resume their movement in a very short time after the completion of the union.



1, 1, 1. Tin splint, with foot part for the lower fragment.
2, 2. Tin splint for the upper fragment.
3, 3. Supporting steel bows.
4, 4, 4, 4. Stands.
5, 5, 5. Staffs.
6, 6, 6. Screws fixing the stands to the staffs.

7, 7. Steel bows for splint 2, 2.
8, 8. Wheels.
9, 9, 9. Supports of 5, 5, 5.
10, 10, 10, 10. Steel bows.
11, 11. The rods for directing the wheels.
12, 12, 12, 12. Inclined wooden plane.

In complicated fractures, the extremity is sufficiently accessible to allow the management of wounds, etc.

An essential advantage of the apparatus is, that oblique fractures do not require particular extension; the extremity is put in the well-padded apparatus, and fixed by bandages; as soon as the muscular stiffness leaves off, the apparatus effects the extension insensibly.

The patient does not require frequent looking after, and the bandages may be removed should pain arise, leaving only one to keep extremity and apparatus together; the friction be-

tween extremity and apparatus being still sufficient to keep up some extension until medical assistance can be obtained.

N.B. I take the opportunity of stating that Mr. Stanley is making trial of this apparatus in the wards of St. Bartholomew's Hospital. Also am I ready to give any particular information concerning the age, cause, duration, &c. of the cases; Professor Dumreicher having favoured me with a full account of the apparatus, its application in particular cases, &c.

28, Bunhill-row, Finsbury, Jan. 11, 1857.

THREE CASES OF OVARIAN DROPSY INJECTED WITH TINCTURE OF IODINE.

WITH REMARKS.

By ROBERT GEORGE HARDWICK, Esq.

House Surgeon to the Leeds Infirmary.

(Continued from page 111.)

Remarks.—As the number of cases of ovarian cysts injected with iodine is at present limited, I thought the above cases worthy of record, more particularly as one of them is rendered more valuable by a post-mortem examination. I do not offer them as being complete in themselves, but because they throw out some useful and practical suggestions, which may be further worked out as experience increases.

It is worthy of notice how rapidly the iodine was absorbed by the cyst, almost, if not quite as quickly, as it would have been by the stomach; there was decided burning of the throat attended with sickness in ten minutes after the operation; and it would appear that this, as well as the other local symptoms, is dependent on iodine not only being circulated in the blood, but being actually eliminated at the part. I infer this from the fact, that as soon as the local symptoms in a part or organ ceased, the iodine could no longer be detected; thus in the case of Chew, on the fifth day after operation the soreness, tenderness, and smarting of the eyes had disappeared, and the analysis showed that no iodine could be found in the tears. On the following day the burning of the throat had gone, though a little dryness remained, and the saliva in a corresponding manner showed very slight traces, in fact was only turned a faint pink instead of a blue colour. During all this time the poison was found in abundance in the urine and feces; but on the ninth day after operation it was no longer there, and the sensation of heat on passing the stools and urine had also disappeared. It was remarkable in Kenny's case, that she vomited most urgently, the matter being highly charged with iodine; but her bowels were constipated throughout, not being opened till the fifth day, and the poison was never eliminated by this secreting surface; while in Chew's case there was diarrhoea from the first, with very little vomiting, and the stools contained an abundance of iodine. In each case the throat was the first affected, and the thirst dependent on it was all along the most distressing symptom. The perspiration and vapour of respiration never appeared to contain iodine. I cannot answer positively as to whether it was secreted by the skin, since it was always so hot and dry; but I think I may fairly conclude it was not present in the vapour of respiration, or I should have found it. The manner in which I tried to obtain these secretions for analysis was the following: For the skin, I just moistened filtering paper with a solution of starch, and then placed it on the skin, so that it might absorb any exhaled fluid; I also poured a few drops of the solution on the skin; and lastly I moistened the inner surface of a white egg-cup with the same, and then attempted to collect the sweat from the axillæ; to each of these I applied the test for iodine. For the breath or aqueous vapour from the lungs, (for the iodine is most probably eliminated as hydriodic acid in solution), I allowed the patient to breathe on a white plate moistened as before; also into the egg-cup; and, as a third experiment, I filled the egg-cup with a solution of starch, into which was inserted the end of a glass-tube, and then the patient breathed through it. Each of these trials was generally continued for five or ten minutes, but when the test was applied they did not respond, and, therefore, I think the secretion did not contain iodine. The test used to set free the iodine was nitrous acid gas, obtained by boiling together sugar, water, and concentrated nitric acid; the suspected fluid being mixed with a few drops of solution of starch, and this gas passed through, the iodine was immediately liberated, forming a blue colour with the starch. As a proof of the delicacy of this test it is mentioned in the notes that the urine responded to it when mixed with 1000 times its weight of water. This does not show that the poison was eliminated in very large quantities at once, as might be supposed, for I found that the urine of a patient who was taking 12 grains of iodide of potassium daily answered readily when diluted with 200 times its weight of water, and her saliva immediately assumed a bright blue colour on the application of the test. If iodine had been eliminated with the breath, would not it

have been thus detected when the secretions were carefully analyzed every day?

The two patients whose secretions were analyzed were injected, one with the London tincture, the half-pint of which contains iodine, 3ij., iodide of potassium, 3ss; the other with the Edinburgh, half a pint of which contains iodine 3v. Now, it is worthy of notice that the iodine ceased to be detected on the 9th day with the English, and on the 12th day with the Edinburgh tincture. The question arises, Was the more rapid elimination owing in the former case to the large quantity of iodide of potassium and smaller quantity of iodine; or was it owing to the condition of the patient? In the two cases in which the Edinburgh tincture was used, loss of consciousness occurred between one and two hours after the operation, and continued twelve and thirteen hours respectively; while in the case of the London tincture, the symptoms were more like those of depression. Was this delirium owing to the iodine, or to the half-pint of rectified spirit? No mention is made by either Dr. Taylor or Dr. Christison of delirium as a symptom of full iodism; but the largest dose that I can find recorded was 3ijss., a much smaller quantity than each injection contained. Mr. Teale suspected it in his two cases to be due to the alcohol. But in Mr. Hey's case, though the quantity of alcohol was the same, there was no delirium; this might be owing to the more debilitated state of the patient. It is an interesting therapeutical fact, that Kenny, who had been subject to attacks of erysipelas, became affected with it while under the full influence of iodine; and the attack, though mild, was equally severe with those I had seen her have previously.

In Chew's case, the manner in which, at an early date after the operation, the tumour appeared to have sunk down to the right iliac region, where it first made its appearance, was very fallacious, on account of the dulness being limited to and fixed in that part, while the rest of the abdomen was very resonant, as if the intestines had resumed their old position in front of the abdomen. And again, later on, when the body was much distended with a large amount of fluid, the highest part, whatever it happened to be, was resonant, simulating very closely ascites. The diagnosis between these two diseases is rarely so perplexing. Dr. Walshe and Dr. Ballard mention instances of resonance in ovarian dropsy, caused by a portion of the intestines being in front, but this could hardly occur to a sufficient extent as to simulate ascites. In a patient on whom I witnessed Mr. Teale perform ovariectomy, the transverse colon lay in front of the tumour; but, as may be imagined, the resonance caused by it was very trifling. Dr. Ballard has mentioned another case, where the sac communicated with the bowel, and after having been evacuated its contents became filled with gas. Dr. Watson mentions a case that had been previously tapped, and the second time became distended with air; this, though most like Mr. Hey's case, was not so difficult of diagnosis, on account of the large quantity of fluid (two gallons) being absent. On turning the patient's body over on the *post-mortem* table, I was struck with the manner in which the fluid could be heard to rattle; and this suggested to me, that in a case of cystic disease, containing both fluid and air, the true nature of the case might be ascertained by laying the ear on the patient's abdomen and shaking her, when an exaggerated form of succussion would be heard, similar to a well-marked case of pneumo-thorax. The limited dulness in the right side, and its subsequent disappearance as the abdomen became more distended, I should explain by supposing that the injected cysts, a few days after the operation, contained more air than fluid, and so allowed the dulness caused by the smaller secondary cysts at its base to become apparent; but, as the larger sac increased in size, it pushed back these smaller cysts which had formed no adhesions to the posterior part of the abdomen, occupying the front and sides itself.

Dr. Elliotson has drawn attention lately to functional murmurs of the heart, caused by the pressure of a large accumulation of abdominal dropsy. This case forms a very complete example; for the sixth tapping having been accidentally delayed beyond her usual period, the quantity of fluid was greater than either before or since, and she became subject to so loud a bruit at her heart that anybody standing in the ward could hear it, and she used to amuse the patients lying near her by the noise it made. I have carefully examined her heart both before and after each tapping since, but have never heard any bruit again. I think the slight ren

found in one of the aortic valves could not much, if at all, impair its action, and is not sufficient by any means to account for this phenomenon. The heart, as mentioned, was otherwise healthy.

It is useful to inquire into the cause of failure in the case which terminated fatally. The patient was of a somewhat strumous habit, as evidenced by the old tubercles in the lung; her constitution was, no doubt, much weakened by the long-standing disease; but it is doubtful whether this had so much influence as the state of the tumour itself, having frequently been distended to a very large size, thus diminishing its power of contraction. This may also have been more difficult, on account of the extensive adhesions to the walls of the abdomen in front. It has not, however, been thought advisable to risk an operation that has yet to be established, the best cases, viz., those which, from the kind of fluid, the uniform character of the tumour, etc. it may be inferred are of a monocystic nature, and especially as these sometimes go on very favourably with tapping only. I may mention, in illustration, a case of Mr. Teale's, that was in the Hospital a short time ago; she had only been once tapped previously, and that was nine years ago, the fluid having very slowly reaccumulated. Mr. Teale did not think it advisable to put her to the danger of injection, and so only evacuated the fluid. Again, in the case of a girl, aged 20, Mr. Hey, under whose care the patient was, contented himself with paracentesis only, because the tumour was of a uniform character, with thin walls. It is now five months since the operation, and there has not been the slightest return. In both these cases the fluid was perfectly clear and colourless, like water; in one there was no albumen, and in the other only a small quantity. A very interesting fact in the case of Chew was, that the fluid in the smaller cysts at the base of the tumour had undergone the same change as in the larger one, although there was no communication between them. On the prevalent supposition that the injection effects its cure by producing inflammation, it would appear as if injecting the larger cyst had a tendency to cure the secondary ones, if the lymph had been of a healthy adhesive character. But it seems to me very doubtful whether the iodine, when it is successful, acts in such an indirect manner. I should rather feel disposed to look upon inflammation as a cause of failure; for it is difficult to imagine it occur over so large a surface without any pain or tenderness, as in the two successful cases, while both these symptoms were present where the inflammation was proved to exist. Besides, the cysts do not seem to contract and disappear, as they should do if their walls adhered together, but remain apparently in the same state as after the tapping. It would seem as if a process of absorption were set up by the iodine, which keeps the effusion in abeyance. This is evidently the case while the iodine is being absorbed, and probably for several months, at least, after the operation, for the tumours remain as before, neither enlarge nor diminish, but still contain some fluid.

Leeds General Infirmary, December 4, 1856.

THE LONDON

PRACTICE OF MEDICINE AND SURGERY.

STATISTICAL REPORT OF THE PRINCIPAL OPERATIONS

PERFORMED DURING THE LAST THREE MONTHS OF 1856.

(Continued from page 115.)

THE subjoined report includes, as usual, the following Hospitals:—University College, King's College, St. Bartholomew's, St. George's, Guy's, St. Thomas's, the London, the Middlesex, the Westminster, Charing-cross, St. Mary's, the Metropolitan Free, the Marylebone, the Hospital for Sick Children, and the "Dreadnought" Seamen's Hospital.

LIGATURE OF ARTERIES.

Case 1.—Guy's: Mr. Hilton.—A man, aged 51, in good health, was admitted with an aneurism of the femoral artery, the size of a large orange, just below Poupart's ligament. It had been noticed three months, and was fast increasing in size. A pressure was tried for a few days, but could not be

borne, and the external iliac artery was accordingly ligatured. Very little disturbance of parts occurred during the operation; the ligature was placed more than an inch above the sac. The ligature fell during the fifth week; and excepting some sloughing of the wound, the subsequent progress was uninterruptedly good. At the end of about three months the man left the Hospital, the aneurism being solid and absorbed, and the wound quite healed.

Case 2.—Guy's: Mr. Cock.—A cachectic man, aged 20, admitted with a large false aneurism in the thigh, consequent on a wound with a penknife. The artery was exposed, and tied above and below the wound on the tenth day after the accident. (For details of this case, see the *Medical Times and Gazette* for January 21, 1857.)

Case 3.—St. George's: Mr. Pollock.—A man, aged 30, in good health, was admitted with a large diffused aneurism in the popliteal space. It was increasing rapidly, and it was therefore determined to apply a ligature immediately. The superficial femoral was tied in Scarpa's triangle in the usual manner, some little difficulty being encountered from an enlarged gland overlying the artery. The man recovered without a bad symptom, but the contents of the aneurismal sac were slow in absorption, and had not wholly solidified when the man left the Hospital.

Case 4.—St. Thomas's: Mr. Macmurdo.—A man aged 30, a labourer, admitted on account of a popliteal aneurism of large size and of uncertain duration. Compression treatment was tried for more than a month. The patient, however, was very intractable, and the progress was not satisfactory. The tumour got very painful, and at length became diffused. Ligature of the superficial femoral in Scarpa's triangle was performed. Gangrene immediately followed. Amputation was done on the second day, and death resulted five days after. About a pound of blood was found diffused between the gastrocnemius and soleus. The arteries generally were diseased. (See Amputations, Case 17.)

Case 5.—King's College: Mr. Fergusson.—A healthy man, aged 30, admitted on account of an aneurism of the common femoral just below Poupart's ligament, the size of an orange, and of six months' duration. An attempt was made to employ pressure, but it could not be borne. Ligature of the external iliac was performed. The man had an attack of erysipelas, which nearly proved fatal. The ligature fell on the 26th day. The aneurismal tumour became quite solid and mostly absorbed. He left the Hospital, quite well in every respect, at the end of two months.

EXCISIONS OF JOINTS.

Number of cases 14. Recovered 5. Under treatment 5. Died 4.

Case 1.—King's College Hospital: Mr. Fergusson.—A girl, aged 11, the subject of diseased elbow-joint for eight months. There were numerous sinuses and much thickening. Excision of the joint was performed by means of the single longitudinal incision. (October 4.) The case did uninterruptedly well.

Case 2.—King's College: Mr. Fergusson.—A woman, aged 27, the subject of chronic disease of the knee-joint. The joint was generally swollen, flexed, stiff, and very painful, but there were no sinuses. The disease was of three years' duration, and she was in very feeble health. Excision of the joint was performed in the usual manner on October 11. Pus was found in the joint, and strumous deposit in the end of the bones. Very little bleeding occurred. The patella was left. The patient appeared to be doing pretty well, but continued very feeble. The parts were in good position, and the suppuration was not very profuse. The wound cicatrised to a great extent. Death, in a fainting fit, occurred on November 24. It appeared to be from pure anæmia, and no visceral disease was found. The process of union was progressing satisfactorily.

Case 3.—King's College: Mr. Fergusson.—A soldier, aged 30, admitted with a stiff, straight arm, from an unreduced dislocation of the radius and ulna of one year's duration. Excision of the articulation (June 7) by the H-incision. The case did uninterruptedly well, and in November the parts were soundly healed, with a good degree of motion.

Case 4.—St. Bartholomew's: Mr. Paget.—A man, aged 21, the subject of old-standing disease of the elbow-joint. There were extensive abscesses all round the articulation, and the cedematous swelling was very great indeed. Excision of the joint was performed by the single longitudinal incision. The

case progressed well, but the man has been sent into the country, in the hope of more rapid improvement.

Case 5.—King's College: Mr. Fergusson.—A woman, aged 31, the subject of diseased carpus and wrist-joint. Several sinuses led down to diseased bone. She was strumous, and much out of health. The joint was resected, and several of the carpal bones removed. Recovered, but the hand is not a promising one. To attend as an out-patient.

Case 6.—King's College: Mr. Bowman.—A girl, aged 16, in good health, the subject of chronic disease of the knee-joint. The knee was bent at an acute angle, and quite stiff. There were the scars of some closed sinuses, but no active disease existed. The tibia was displaced outwards, and there was some swelling about the parts. The disease had followed a sprain two years before. Mr. Bowman excised the articular extremities of the femur and tibia, leaving the patella. It was necessary to cut away three slices of the tibia before the leg could be brought down. The joint was found in a condition of fibrous ankylosis. The hamstring tendons were not divided. The case did uninterruptedly well after the operation.

Case 7.—King's College: Mr. Partridge.—A feeble man, aged 62, was admitted with a severe compound fracture, laying open the elbow joint. Primary excision of the ends of all the bones was performed. For three weeks subsequently all went on well. Erysipelas then supervened, and under it the man sunk in the sixth week. The bones were covered with granulations, and the healing process was advancing favourably.

Case 8.—King's College: Mr. Partridge.—A man, aged 30, admitted on account of disease of the knee-joint, of two years' standing. There was great swelling, and several sinuses communicated with the joint. The disease was acute and progressive, the patient very low, and amputation was the only alternative to excision. Under these circumstances Mr. Partridge determined to excise. An H-shaped incision was practised, and the extremities of the two bones sawn away, the patella being allowed to remain. The joint proved to have been completely disorganised, and the cartilages were extensively ulcerated. After the operation erysipelas occurred, and the man very nearly sank. He is now steadily improving in health, and the parts are in good position. There is still, however, much thickening about the joint. It is four months since the excision.

Case 9.—Charing-cross: Mr. Hancock.—A boy, aged 14, in very bad health, the subject of old-standing (five years) disease of the hip-joint. The disease had perforated the acetabulum, and a collection of matter had formed within the pelvis. Excision of the head of the bone and great trochanter was performed, and at the same time the acetabulum was gouged, and the pelvic abscess was emptied. The finger could be easily passed through the bone into the pelvis. The boy rallied well after the operation, and progressed most favourably. He is now (six weeks) able to walk about the ward, and the wound is all but healed.

Case 10.—University College: Mr. Erichson.—A man, aged 59, the subject for six years of disease of the elbow-joint. Several portions of necrosed bone had been previously removed, but the disease continuing, excision of the joint was performed. A single longitudinal incision was practised, and the ends of the three bones removed. The parts healed quickly, and the new joint has a fair degree of motion.

Case 11.—The Middlesex: Mr. De Morgan.—A lad, aged 17, the subject of disease of the hip-joint. Spontaneous dislocation of the femur had occurred two months before. Excision of the head and neck of the bone was performed. The head was found in a carious condition, but the acetabulum was almost sound. Very little constitutional disturbance followed the operation, and the patient is doing well in every respect.

Case 12.—St. Thomas's: Mr. Simon.—A man, aged 34, whose elbow had been for some time fixed, swollen, and inflamed. Incisions were made, as if for resection of the entire joint, but the olecranon only was removed, the other bones being found healthy. Doing well.

Case 13.—University College: Mr. Quain.—A man, aged 39, in poor health, the subject for four years of strumous disease of the knee-joint. Excision of the whole articulation. The man sank, and died on the thirteenth day. At the autopsy all the internal viscera were found healthy, but there was extensive suppuration among the muscles of the thigh.

Case 14.—University College: Mr. Henry Thompson.—A man, aged 37, in fair health, the subject of dislocation of the right knee from old disease (three years ago). He also suffered from talipes varus of the left foot, which had been but partially rectified by operation. Excision of the knee-joint was performed, and the limb brought into a straight position. For some time afterwards things appeared to be doing well, but subsequently suppuration occurred about the ends of bones, and abscesses formed in the adjacent structure. He sank under the profuse discharge, and died about nine weeks after the operation.

TREPHINING OF THE SKULL.

Case 1.—University College: Mr. Erichsen.—A boy, aged 8, had received a blow on the head three weeks before. Symptoms of suppuration beneath the cranium having supervened, trephining was performed, and a collection of matter between the dura-mater and skull evacuated. Death followed two days afterwards, and at the autopsy a collection of matter was found deeply placed in the brain.

Case 2.—Guy's: Mr. Birkett.—A boy, aged 14, admitted on account of a compound fracture of the left parietal bone with depression. The dura-mater was not torn. The loose fragments were removed, and the depressed ones elevated. The boy did well at first, but the dura-mater ulcerated, and hernia cerebri followed. Death in the eleventh week. An abscess in the anterior lobe of the left hemisphere was the immediate cause of death.

Case 3.—Guy's: Mr. Birkett.—A man, aged 38, admitted with a compound and comminuted fracture of the parietal bone, from a blow from a falling brick. The dura-mater was uninjured. Some portions of bone were removed, and others elevated. An attack of acute bronchitis, with erysipelas of the head and face followed, but he ultimately recovered well. A few small pieces of bone exfoliated. Left the Hospital ten weeks after admission.

REMOVAL OF LOOSE BODY FROM THE KNEE-JOINT.

A man, aged 30, who had suffered occasionally from severe pain in the knee-joint for two years, was admitted under Mr. Erichson's care into University College Hospital. A small, loose cartilage was discovered, and removed by means of a valvular subcutaneous incision into the joint. Recovered.

EXTIRPATION OF THE EYEBALL.

Case 1.—The London: Mr. Curling.—A man, aged 48, who had lost the sight of the right eye about eighteen years ago. Four months before admission he had noticed a swelling in the orbit, and the globe had been pushed forward. Mr. Curling removed the contents of the orbit. The disease proved to be melanosis external to the globe. (See report of the Pathological Society, January 6th.) *Case 2.*—King's College: Mr. Bowman.—A man, aged 39, one of whose eyes had been destroyed by injury a year ago. Sympathetic irritation of the remaining eye having occurred, the lost organ was removed. Recovered.

(To be continued.)

HOSPITAL NOTES.

RARE FORM OF FRACTURE OF THE NECK OF THE HUMERUS.—A muscular young man has just been discharged from St. Mary's Hospital, where he had been for some time under the care of Mr. Coulson, on account of an unusual injury to the left shoulder. At the time of admission it was diagnosed as a fracture of the neck of the humerus, with, possibly, dislocation of the head forwards. Crepitus was felt distinctly, and the symmetry could, without much difficulty, be restored, but the bone could not be retained in place. All appliances to secure coaptation failed, and he now has (ten weeks after) marked deformity. The motions of the shoulder arc, however, good, and he will probably in time regain almost perfect use of it. The opinion now entertained is that it has been a fracture through the anatomical neck, with a splitting of the upper part of the shaft. As it has united there is a decided prominence of the anterior part of the shaft at its upper end; indeed the bone appears to be much widened. The articular head is evidently in the glenoid cavity. The arm is about half an inch shorter than the other. Mr. Coulson has adopted the plan, which it is much to be wished were general, of giving to the lad a written statement of what the supposed

injury has been, so that should he come under care for any subsequent accident the Surgeon will have an invaluable guide in treatment; or should an opportunity be afforded for dissection of the part it may not be lost for want of attention being drawn to it.

NEW SUTURE.—At the Samaritan Hospital, last Wednesday, Mr. Spencer Wells made use of a new form of suture he has devised, in an operation he performed for the cure of vesico-vaginal fistula. It appeared to be very easily applied, and the denuded edges of the fistula seemed to be kept in very accurate apposition. The woodcut annexed represents



the suture when complete. A pin armed with a shot and perforated bar is first passed through one edge and then through the opposite edge of the fistula. A second bar is then passed over the point of this pin, and then a shot, which is pressed by forceps on to the pin, so as to fix this bar in its place. The pin is then cut off close to the shot. Mr. Wells used a bar perforated with three holes, as the fistula was a large one. When complete the suture acts on exactly the same principle as the quilled suture, but it

is much more easily applied, as the pin answers all the purpose of the needle and thread, is much more easily passed, and it is much more simple to fix the bar by a shot than by tying a knot at a considerable depth from the surface. Mr. Wells found it advisable to pass a suture both above and below the ends of the bar suture, owing to the length of the denuded edge of the fistula; and he did this by a needle carrying a silver wire shot at one end, then passing a shot over the other end of the wire after it had passed through both edges, so that the two shots pressing on each side of the fistula kept the raw surfaces in apposition. One great advantage of this suture is the ease with which it may be removed, as it is only necessary to snip off one shot to allow the other to be drawn out with the wire or pins fastened by them.

REDUCTION OF OLD DISLOCATION OF THE HUMERUS BY MANIPULAR MOVEMENTS, WITHOUT EXTENSION.—In a case recently under his care in St. Bartholomew's, in which a very fat woman was the patient, Mr. Wormald succeeded in reducing an old (six weeks) dislocation of the humerus by manipular movements, without extension, on the principle now almost universally adopted with those of the femur. The humerus differs from the femur in having an almost straight shaft up to its articular end, and no leverage can therefore be obtained, as in the case of the head of the femur, which is almost at right angles to its shaft. By bandaging a rectangular splint to the arm and forearm, Mr. Wormald made the latter into a lever, by which to act upon the former. The operator's knee being put under the patient's elbow as a fulcrum, the forearm was depressed, and the bone lifted into its place. The patient was under chloroform, and reduction occupied only about ten minutes. For ordinary cases this plan will, of course, not supersede the very simple and effectual ones already in use, but in those difficult of reduction is worth being had recourse to.

AMYLENE.—On Friday last amylene was employed in several operations at the Ophthalmic Hospital, and with very good success. It appears to be especially adapted for operations on the eye, which are usually of very short duration; and after which the avoidance of sickness is of great consequence. Dr. Snow, who administered it, stated afterwards, that these cases made up the number in which he had given it to a total of 62, and that in only two had there followed any sickness, and in both these it had been but trivial.

OPERATIONS FOR FEMORAL HERNIA WITHOUT OPENING THE FASCIA PROPRIA.—Within the last few years it has become the custom with several Surgeons, among whom we may mention Mr. Birkett, of Guy's, to avoid opening not only the sac but also the fascia propria in cases of femoral hernia, when such may be practicable. We saw Mr. Birkett operate on a woman the other day by that method. Gimbernat's ligament was readily reached when the cribriform fascia had been divided, and having been notched the gut easily returned. An objection to the plan sometimes made is, that the sac and fascia constitute together a mass of some thickness, in which it is just possible a small portion of bowel might be concealed. Such an objection lies with threefold force against all reductions by the taxis. The rule now almost established in herniotomy seems to be to divide as little as possible, that is, to make the reduction differ as little as may be from one by the taxis without

division of the structure. By leaving the sac covered and protected by the fascia propria, the risk caused directly by the operation amounts to little more than a wound of the skin, and the risk of peritonitis must be somewhat diminished.

DR. SIMPSON'S MORPHIA SUPPOSITORIES.—Mr. Spencer Wells has introduced into use at the Samaritan Hospital, a form of Morphia Suppository, used with great advantage by Dr. Simpson of Edinburgh. Mr. Wells has found it a most convenient form of suppository after operations on the vagina, rectum, uterus, or perineum of women, both in hospital and private practice, and especially so after operations on the male genito-urinary organs, as lithotrity, in cases of retention of urine, irritable stricture, &c., and after division of fistula in ano, or the removal of piles or prolapsed mucous membrane of the rectum by the ecraseur. They act much more efficiently than the soap and opium in common pill use as a suppository, and are seldom or never expelled from the rectum after their introduction above the sphincter. They are made extremely well by Messrs. Duncan and Flockhart, of Edinburgh, and supplied by them at a very reasonable rate, of various strengths. But as they are likely to come into more general use we append the formula on which they are prepared. The following is for the half grain suppository:—Take of acetate of morphia, 6 grains; sugar of milk, 1 drachm; simple cerate, half-a-drachm, or as much as may be sufficient to make a proper consistence, and divide the mass into twelve suppositories. Then dip each suppository into the following mixture, to form a coating:—Take of white wax 1 part, lard plaster 2 parts; melt together. The best way is to insert a needle into the apex of the suppository, dip it into the melted wax and lard, and immediately afterwards into cold water to harden it before it loses its shape. The shape is conical, like a pastile. It is easily introduced by the finger, or more neatly by the ordinary ivory suppository syringe. Mr. Coulson has also used these suppositories lately in several lithotrity cases, and has found them of the greatest benefit in allaying the irritation which often attends the passage of the fragments of calculi through the urethra.

EXPECTED OPERATIONS.—At St. Bartholomew's, on Saturday (this day), Mr. Stanley has a case in which perineal section has to be performed, and another in which amputation of the leg will be done. At King's College Mr. Fergusson has a hare-lip, and a case of plastic operation on the face. At the Metropolitan Free, on Monday, Mr. Hutchinson has a case in which diseased bone is to be removed from the ankle-joint, and probably the articulation excised; and a second, in which a large exostosis is to be removed from the upper and inner part of the humerus. Mr. Baker Brown will operate on a case of vesico-vaginal fistula, and a case of ruptured perineum, at St. Mary's, on Wednesday.

NOTES AND QUERIES.

He that questioneth much shall learn much.—Bacon.

No. 185.—EMBALMING BY THE GANNAL PROCESS.

The following paragraph appeared in a letter from the *Times'* Correspondent in Paris, January 14, in reference to the body of the late Archbishop of Paris:—"The embalming also was a failure; because, while they used the Gannal process, they also had the idea of extracting the heart from the body, and mortification ensued."

It is not a very clear statement, but I presume by "mortification" is meant that decomposition rapidly ensued, and so interfered with the embalming process. Can any of your readers inform me what is the nature of the Gannal process, and whether other methods are had recourse to for the same purpose?

I am, &c.

January 22, 1857.

E. W.

No. 186.—THE STUFFED SKIN OF AN EMPEROR.

Valerian, Emperor of Rome, was taken prisoner, and afterwards kept in chains by Sapor, King of Persia. He was either killed in a tumult, or by order of his conqueror, fearful, perhaps, of losing his valuable living trophy, in the year 269. The body of the dead Roman Emperor was treated with no more delicacy than when it had tabernacled the immortal park of a living one. It was skinned. The skin after being

tanned, was stuffed, painted red, and suspended in the chief temple of the capital. Here it remained for many years. It was the popular spectacle for holiday-makers and visitors from the country. But it was put to more important ends than this: it was made a diplomatic engine, of much significance and efficiency. In after-times it often happened that the Roman envoys at the Persian court had misunderstandings, more or less serious, with the Government to which they were temporarily accredited. When these ambassadors from Rome grew arrogant in their demands, it was the custom to conduct them into the presence of the stuffed skin of the old ex-Emperor of Rome, where they were asked if humility did not become them at sight of such a spectacle.—*Monarchs retired from Business.* By Dr. Doran.

No. 187.—AN ENGLISH GIANT.

As I have seen some observations concerning "*Irish Giants*," "*Notes and Queries*," perhaps the following notice of an "*English Giant*" may be interesting.

"John Middleton, born in the year 1578, was remarkable for his large stature and extraordinary strength. It is traditionally reported, that Sir G. Ireland took him to London, and introduced him to the presence of King James I., dressed up in a very fantastic style; on his return from London a portrait was taken of him, which is preserved in the library of Brazen-nose College, Oxford. Dr. Plott says, "His hand, from the carpus to the end of the middle finger, was seventeen inches long; his palm, eight inches and a half broad; and his height, nine feet eight inches, wanting but six inches of the size of Goliath." I am, &c. H. L. MAYSMOR.

N.B. The above is a correct copy from the "*Mirror*" of 1825.

No 188.—TOBACCO QUERIES.

Will you allow me to ask Dr. Webster, (since his name has been drawn into the Tobacco controversy in a contemporary, and not denied by him,) from what statistics he has been enabled to state that "Cretinism is invariably present in post-mortem examinations of inveterate smokers?" I am induced to ask this question, since it is proposed that Insurance Companies should be cautious in accepting a smoker's life!

It is affirmed by a few, that Tobacco is a sedative in certain forms of pulmonary and neuralgic affections. Whence comes it, that Dr. Copland and others have substituted Stramonium for Tobacco? Dr. Conolly states that, "in very rare instances, he allows an almost homoeopathic allowance of Tobacco to his patients."

Will any M.D. answer me whether he ever seriously recommended a patient (who had never done so previously) to commence smoking as a palliative or a sedative? Corpulent people are in the habit of smoking much, with the idea that it reduces their bulk; and I have heard many lean persons confess that they were wasting or losing flesh by smoking. Does this not point to its pernicious effects? In our jails, it has been remarked, that there has been a marked improvement in the health of prisoners (after a certain period) who were habitual smokers! Your Paris correspondent may be able to throw some light on the subject of smoking with Frenchmen. I am, &c. AN INQUISITIVE M.D.

ANSWERS.

No. 181.—VACCINATION OF PUPPIES, ETC.—HYDROPHOBIA.

The Editor of the *Veterinarian* for January, 1850, states "that vaccination for the prevention of distemper is old as Adam. Years ago we ourselves experimented in this way, but with no better success than our forefathers. The substitute is in fact worthless."

I have called the attention of the Editor of the *Veterinarian* to Dr. Elliotson's recent communication to the *Medical Times and Gazette*, and I have likewise suggested to him a trial of vaccination for the prevention of measles in the pig and scab in the sheep! For the proper mode of vaccinating puppies, several methods of performing it are given in the *Field* for December, 1856. With respect to the means of checking hydrophobia, and curtailing the breed of neglected and half-famished curs who have the run of the streets, I humbly suggest that emasculation or castration should either be made compulsory by the Legislature, or left to the option of the owners, who, if they cause it to be done, should be exempt from the dog tax. It should be performed about the time the pups are five weeks old. Castrated dogs are much more docile

and agreeable. It is a fact worthy of observation, that dogs, such as lap-dogs, etc., that are properly looked after and regularly fed, are scarcely ever attacked with hydrophobia. Statistics will confirm this.

I am, &c.

JS. BRUCE NEIL.

Boulogne, Jan. 18, 1857.

No. 183.—METHYLATED SPIRIT.

Your querist, W. F. W., will find, on reference to the Act 18 and 19 Victoria, c. 37, that "Methylated Spirit" is a mixture composed of nine parts of spirits of wine (not less than fifty per cent. over proof), and one part of wood naphtha.

I am, &c.

HENRY JOHN YELD,

Undergraduate of the University of London.

Stockport Infirmary, January 28, 1857.

No. 183.

2. Methylated Spirit is, I believe, synonymous with pyroxylic spirit, or pyroligneous ether, which is sometimes sold as *rectified naphtha*, for the use of spirit lamps, &c. In chemical composition it is an hydrate of oxide of methyle ($C_2 H_3 O + H O$). See Pereira's *Mat. Med.* vol. ii. part ii. page 1938.

3. Two opinions are entertained in reference to the action of Turpentine in the production of symptoms of lead poisoning. The first of these, and an opinion entertained by many eminent toxicologists, is that the oil of turpentine, and a salt of lead being mixed, the volatility of the former coming into action, causes a portion of it to arise in vapour, carrying with it a proportion of the salt of lead, which in this way enters the lungs, &c. In this manner the turpentine acts mechanically, and the symptoms are really due to the lead. The second opinion is, that some of the symptoms usually attributed to poisoning by lead, arise from the vapour of turpentine acting itself as a poison. Both views were, I believe, originally brought forward by Dr. Jonathan Osborne, of Mercers' Hospital, Dublin. If I may be allowed to express an opinion, I would state, that the comparative rarity of lead poisoning among painters, during late years, tends to negative the latter proposition, as it is well known that salts of zinc are now usually substituted for those of lead in mixing paints, while turpentine continues to be as much used as formerly. Dr. Osborne's remarks were published, I think, in the *Dublin Medical Press*, but I cannot find the numbers. I am, &c.

Coleraine, January, 1857.

A. C.

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Medical Times & Gazette.

SATURDAY, FEBRUARY 7.

FRAUDS IN FOOD.

THE publication of a new work on Adulteration by Dr. Hassall recalls attention once more to the "Death in the pot" revelations first brought into notice in this country by the labours of Mr. Accum, and recognised at last by the Government in the formation of Mr. Scholefield's committee of inquiry. As regards active legislation for the suppression of adulteration, the results of the Committee's exertions have led to nothing new, but there can be little doubt that the publication of the report with its disclosures, together with the publications of private individuals, have given a wholesome check to the continuance of this fraudulent and dangerous practice. If it should be asked who are the *chief* perpetrators

of adulteration, the answer would be, according to Dr. Hassall, not the trader of articles in the raw state, not the retail sellers, but an intermediate class, called grinders, who take the raw stuff from the importer or producer, and, by their extensive operations and machinery, prepare it for the retailer.

At the same time it must not be presumed that the other two parties of this invincible trio are ignorant of the deceptions with which the "grinder" cajoles the unhappy million. The dealer in the raw material is, as his business implies, the most innocent of all. But the retailer is pretty well up in the secrets, and when his superior fails in the trick, or does it imperfectly, he gives, as far as his limited means permit, a helping hand, not to say that he knows when he buys, by the vibration of his purse-string, the key of the composition. The articles charged with substances really dangerous are fewer in number than we had supposed, but such as are thus adulterated are among the most common articles of consumption, viz., beer, sugar, confectionery, sauces, teas, and pickles, while some of the adulterants rank among the most active of the poisonous substances, including, for a few examples, arsenite of copper, chromates of lead, alloys of copper and zinc, and orpiment. To articles thus adulterated the attention of consumers should therefore be first directed.

But the questions now before us are not so much what are the articles adulterated and what are the adulterants, for these questions have been answered pretty fully of late, but what are the means to be adopted for the suppression of adulteration altogether? Dr. Hassall is for strong legal measures, which should lead not only to the discovery of adulteration, but to the adequate punishment of the offence. We agree with him in these points, as a general principle, but we differ somewhat as to the meaning and manner of an adequate punishment. As regards legal powers for the enforcement of ordinary punishment in shape of fines or even imprisonment, we have sufficient already, and even more than we want, since half of them at least are inactive; and, indeed, were they all pushed to their utmost the good result would be doubtful. In a free country like this, it is most dangerous to make the Government a constant and organised prosecuting body. Under such rule, let a few mistakes be committed, let a few men be punished according to popular feeling unjustly and be thus pushed into the list of martyrs, and the whole system would begin to smell of tyranny, and open itself to suspicion and disgust. What, then, cries alarmed Paterfamilias, Am I to be poisoned, and my family have no redress? May I not take a dish of tea without feeling that I am internally beplastered with black lead; or give my youngest boy a spoonful of eustard without the assurance that I am with my own hand plying his infant digestive apparatus with the three horrible chromates? Or, if my wife ask for bread, am I perforce to offer her blue stone?—Certainly not. This is not our argument. Our view is that the two and only means by which these frauds can be prevented are, first, an improved knowledge among the Paterfamilias class, so that they may themselves detect the poisons and avoid them; and, secondly, a steady and regular system for the exposure of all frauds and defrauders. If a printer were to print works which the people could not read from the badness of the work, that printer would soon find his due meed of punishment without any chastisement from the magistrate. What is true of one thing is of another: if the people could see that they had arsenic on their plates they would not swallow it, or fill the pockets of the man who sold it to them. Knowledge is the only true reformer, and the people are the only true judges. But it may be urged that knowledge is a thing of slow growth, and that while the people are learning, the iniquity is flourishing. True; and therefore a police for the instructive protection of the people is meantime necessary.

Let there be such a police; let there be a complete organisation of scientific men, with a staff of under officers. Let this scientific board have for its business nothing else but the examination of foods, drinks, and drugs brought to them from all quarters. Let the results of their inquiries be regularly registered, and at regular and frequent periods let them bring out a true, complete, and cheap report of their labours, exposing fully every defrauder and his frauds. If this simple plan were carried out, the day of adulteration would soon be past. The terror of notoriety would be a crushing punishment; while the law, instead of being exerted against a supposed offender, would be at every one's service for his defence who knew himself to be innocent. With this simple machinery in hand, the Government might do all that the nation could desire for the suppression of adulteration, and far more than would ever be accomplished by the most severe direct punishments, fines, imprisonment, transportation, the nine-tails, or that immortal cord itself, to which all sane Englishmen turn for protection with so much reverential confidence.

THE WEEK.

We publish in another column an advertisement or circular sent to a patient of a correspondent by Dr. Burnett, of 21, Gower-place, Bedford-square. The name of the gentleman, who states that he has been so lauded by the English press, does not appear in the Medical Directory. His guinea work on the Diseases of the Eye, which has arrived at a thirteenth edition, is unknown to our principal Medical booksellers. We believe we might safely challenge this Dr. Burnett to give the dates of the papers and journals in which the alleged criticisms appeared. *Tait's Magazine*, the *Quarterly Review*, *Dr. Arnott*, etc. are very indefinite references; and the *Times* of October 27, without specifying the year, is almost equally useless to any one who wishes to verify a quotation. We need scarcely add that we entirely disbelieve the correctness of the alleged extracts from the *Times*, the *Quarterly*, the *Edinburgh*, and *Dr. Arnott*, and are disposed to think that if the fame of Dr. Burnett should be transmitted to the latest posterity, to use the terms imputed to the *Times*, it will not be for these "astounding improvements in ophthalmic surgery" of which we have never heard, but for the illustration he affords us of the audacity of puffing in the nineteenth century.

Dr. John Sutton, M.R.C.S., *alias* Dr. Sidney Hall, *alias* Dr. Manning, a short, well-dressed man of gentlemanly manners, apparently about twenty-four years of age, describe as a surgeon, residing at No. 15, Frederick-place, Goswell-road, Clerkenwell, to whose attempt to extort money by publishing a libel against Mr. William Harman, a farmer residing at Sleaford, in Lincolnshire, we alluded last week, has been again examined at the Police court. It is stated in the *Times*, report of the case, that Dr. Sutton, although so young, has published a pamphlet of sixteen pages, entitled "Quackery Unmasked, being a complete exposition of the frauds, impositions, and deceptions practised by those who advertise a speedy, safe, and effectual cure of a particular disease." After stating that he has devoted many years to the consideration of the subject, he has the following remarks on the frauds and impositions of quacks, which are so connected with the charge against him that they are worthy of reproduction here:—"Many who read these pages will respond to the truth of this; will remember, doubtless, the tempting offer, the flattering promise, the guarantee of a cure, which caused them to send pound after pound, in the vain hope of obtaining ultimate relief. The frauds and impositions practised by those unprincipled and ignorant men know no bounds, and are of the most extravagant kind. 'Extortion' is a word which but mildly ex-

presses their ordinary boundary. 'Robbery' would be a more fitting term. And how do they escape punishment? By having the audacity to threaten *exposure*." (The italic is Dr. Sutton's.) "It is then that the victim awakes to the true character of him whom he had imagined to be a faithful Medical adviser, and finds him only an ignorant impostor, in whom every particle of honour, principle, and uprightness is entirely lost. Unfortunately for the sufferer, he has no remedy; fear of the disgrace with which he is threatened, induces him to stoop and gratify the robber's demands; and thus he finds health is lost, his purse lessened, and the villain escapes unpunished, and serves many others in the same manner." The author seems to have described his own course very accurately, yet the complainant accepted an apology. It is stated in another paper that £80 was paid, to add weight to the apology; but this has been denied by Mr. Sutton, in a letter signed John Sutton, M.R.C.S.E. There are five John Suttons in the Directory for 1857; but the only gentleman whose diplomas at the College could possibly correspond with the age of the author of "Quackery Unmasked" are John Sutton, of Kegworth, Derby, and John Maule Sutton, of Tenby, Pembrokeshire. If neither of these gentlemen have removed to Clerkenwell, the College of Surgeons should inquire on what grounds Dr. or Mr. Sutton assumes the title M.R.C.S.E. It is stated in the *Times*' report, that long before the hour appointed for the re-examination of the prisoner, the court and its avenues were crowded by respectably dressed persons who had been swindled by quack doctors, and they seemed very much disappointed at the prisoner's dismissal. Will no amount of exposure warn our gullible classes?

Dr. Simpson, of Edinburgh, has been experimenting on the removal of tumours by a method novel in this country. He introduces a hollow acupuncture needle, or very fine trocar, into their tissue, and injects a few drops of some irritant liquid—such as a solution of chloride of zinc, perchloride of iron, or creosote. The effect has been to destroy the vitality of the tumours so treated, and they have been separated by a process of enucleation. We have seen a somewhat similar plan adopted in Paris by M. Maisonneuve. He has slender stylets made of a paste composed of flour, water, and chloride of zinc. These are baked. A puncture is made in the tumour, the caustic stylet is inserted, broken off, and left. We saw several malignant tumours treated in this manner, and some cases in which a healthy granulating surface was left after the separation of tumours which had been destroyed in this manner.

The paper, "Tracheotomy in Croup," (sec p. 148) which occupied the Medico-Chirurgical Society's last meeting, afforded an interesting illustration of the fallacy of reasoning from limited data, and also of the necessity for a more general registration of *all* cases treated in Hospitals. The author adduced five cases which had occurred in St. George's Hospital in which the operation had been performed, and out of these two had been "snatched by it from the jaws of death." Such a proportion was indeed very encouraging and, when backed by Parisian statistics, constituted a very strong argument in favour of its frequent performance. If, however, we count up the whole of the cases in which it has been practised in the London Hospitals included in our "Statistical Reports of Operations" during the last three years and a half, the matter assumes a very different aspect. By a remarkable coincidence, the only successful cases have occurred at St. George's, and are the very two mentioned in Dr. Fuller's paper. The whole number is thirteen, and of these eleven have ended fatally. Dr. West's experience at the Children's

Hospital of ten cases, did not supply a single successful one. Notwithstanding these facts, however, we do not underrate the value of Dr. Fuller's paper, or differ much from him as to the desirability of having recourse to the operation in such cases as must otherwise end fatally. The patients do not die of the operation, but in spite of it; and, however small the ratio of recoveries may be, it is well worth persevering with, provided that we do not, as we fear our French neighbours have done, attempt to better our statistics by performing it needlessly. That tracheotomy is not in itself an operation of much risk in early life, is well proved by reference to our "Statistics of Operations" just mentioned, since they show numerous recoveries, even at the earliest ages, after its performance for scalds of the glottis and foreign bodies in the trachea. For scalds, during the period referred to, it has been practised eleven times (in all at very early ages), and of these three have recovered—for foreign bodies, nine times, with five recoveries. It is clear that its fatality in croup is from the nature of the disease itself; a conclusion which an *a priori* reasoning might have arrived at with almost equal confidence. Amongst the most important of the points in Dr. Fuller's paper was, perhaps, his insisting on the continuance, after the operation, of the antiphlogistic and mercurial treatment. The change to a stimulant plan has, doubtless, been the cause of failure in some cases.

We have received another letter from Mr. Griffin, in which he thanks the Students of the several Hospitals for the generous aid they have rendered to the cause of the Poor-law Medical officers. He does not advise an aggregate meeting of Students, but a series of meetings in the theatres of the respective schools of Medicine. We are informed that arrangements are now in progress for a general meeting of the Profession upon the subject of the Poor-law grievances; and when the day is fixed the Students will have an opportunity of manifesting, by their presence, the interest they take in the common cause. It appears that Medical officers from twenty Unions not before published have joined the Association within the last few days, and the number of fresh names daily received affords the most satisfactory evidence of the interest taken in the present movement. Mr. Griffin carries on concurrently his efforts on behalf of his Poor-law Medical brethren, and his own warfare with the Weymouth Guardians and the Poor-law Board. In reference to the latter subject, we understand that he has received a somewhat satisfactory communication from the Board at Whitehall, in reply to his representations of unjust treatment in the case of some paupers whom he was called upon to see, in consultation with another Poor-law Medical officer, in an adjoining district. It will be remembered that the local Board refused Mr. Griffin any remuneration for the services he was called upon to render, but without assigning any satisfactory reason for the refusal. The Poor-law Board has decided, in a letter exhibiting the usual amount of official circumlocution, that it is competent for a relieving officer to call in a Medical Practitioner in consultation, in a case of unusual difficulty or danger, and that the Practitioner so called in consultation is entitled to remuneration for his professional services. All this was known before the oracular response from the penetralia of Whitehall; but the oracles, who are so lucid in explaining what was previously perfectly well known, are entirely silent upon the only important matter on which their decision was required, namely, the *amount* of the remuneration to which the consulted Medical Practitioner is entitled. The fee demanded by Mr. Griffin in the case specified was £2 2s., a sum moderate and just, in proportion to the services rendered; but the Poor-law Board "declines to express any opinion as to the precise amount of the fee which Mr. Griffin should receive." Thus the decision of the

matter rests at last with the local Board; and after the insulting manner in which the latter body has behaved, there can be little doubt, that, although compelled by law to pay *something*, the Guardians will reduce the sum to the lowest minimum, and thus compel Mr. Griffin to decline its acceptance. As a finale to the systematic course of meanness pursued by the Weymouth Board, it appears that these worthies have requested that Mr. Griffin may be suspended, and have addressed a *secret* letter to the Poor-law Board upon the subject. That gentleman very naturally asks that he should be made acquainted with the charges brought against him, and concludes his letter by writing, "I court the fullest investigation, and if I deserve censure I shall bow with submission to the stroke." Surely, unless we are again living in the days of the Inquisition, this very moderate request for inquiry will be granted. If it should be refused, some independent member should bring the matter before Parliament.

The mode of election to Hospital appointments has just been under discussion at the Manchester Eye Hospital. Last year the election of Medical officers was placed in the hands of the Committee, and a special meeting was called to consider a resolution which would have the effect of restoring the power of voting in Medical elections to the general body of Governors. It was argued that the new rules had worked well, that the influence of canvassing had been diminished, that more candidates had come forward at a vacancy than on any former occasion, and that a well-selected Committee would be more likely to choose the best man than the general body of Governors. We are happy to add that the new rules are not superseded, and that the elective power has been left in the hands of the Committee.

Mr. Cowper, late President of the Board of Health, has vacated that office, and accepted the Vice-Presidency of the Committee of the Privy Council of Education. Mr. Monsell, from the Ordnance Office, is the new President of the Board of Health. Appointments such as these expose the absurd manner in which our national affairs are managed. Here is a most important post to be filled up—a Minister of Public Health to be named—the Chief Physician to the State to be selected—and the Government remove an amiable, well-meaning gentleman of moderate capacity from an office in which he has acquired some slight knowledge of sanitary matters, to another office of a totally dissimilar character, and supply his place at the Head of the Board of Health by an Irish Member of Parliament, perfectly innocent of any knowledge of hygiene, and principally known heretofore as a hard-working Secretary to the Ordnance, under whose administration shell were sent to the Crimea which would not fit the mortars, and fuses which would not fit the shells. Mr. Monsell having learned by this time the difference between shot and shell, is sent from an office he knows something about, to another of which he can know nothing whatever. How is it to be expected that the country can place any confidence in the Board of Health? This unfortunate Board has been a mistake from the beginning, and there is no hope of amendment until we see its President and members appointed, not because they are related to the Premier, or vote subserviently in the House of Commons, but because they are well qualified to fill their appointments by practical acquaintance with the duties they ought to perform. The day must come when the Chief Minister of Public Health of Great Britain will be some eminent Physician or Surgeon who can be induced by adequate remuneration to devote his Professional knowledge to the service of the public.

The New Medical Reform Bill is in a fair way of coming before Parliament with the tacit consent, if not the actual support of Government. It is time, therefore, to consider if any clause can be introduced with a chance of success which will protect the public from ignorant [pretenders to medical knowledge and skill. A case which shows the necessity for some such clause occurred last week in Liverpool:—John Hughes, aged 10 years, fell down some steps, and sustained some injury to his shoulder. He was taken to the Southern Hospital. Mr. Garland, surgeon, said the arm was not fractured, but bruised, and he ordered it to be fomented. The deceased's father next took him to Dr. Gildersleeves, Great George-street, and he gave a similar opinion. The father then took him to Mr. Evan Thomas, a celebrated bone-setter, who declared the arm was fractured. He treated it accordingly. Subsequently the boy got worse, and died on Wednesday week. Dr. Gildersleeves said that he had made a *post mortem* examination, in the presence of Messrs. Fenton, Frazer, Thorpe, and Garland, and the cause of death was found to be inflammation of the membranes of the heart, or "pericarditis." The humerus was exposed in its whole length. The arm was examined in the presence of the deceased's father and sister, and it was found that there was no fracture. Whether this bone-setter did harm in this case or not does not appear; but it is very certain that he said the humerus was broken when it was not, and that he was trusted by the friends of the patient, to act in opposition to the advice of regularly qualified medical men.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON EXPLORATION BY COMMOTION.

By M. CRUVEILHIER.

M. Cruveilhier observes that, in all cases of jaundice, as in all other diseases in which he suspects the liver to be affected, he is in the habit of exploring this organ by "commotion." For this purpose, the patient is placed on his seat, and the right side of the thorax is percussed from above downwards, the patient being desired to express himself when aware of unusual sensation or pain. It is very rare in recent icterus, and especially in febrile icterus, for the patient not to announce a marked sensibility as soon as the percussion excites a shaking of the liver. By this means, too, an abscess of the liver, the consequence of a fall from a high place, has been diagnosed. M. Cruveilhier has also applied this mode of exploration to the kidney, spleen, heart, and even the uterus. For the brain, it may be put into force by suddenly pulling at a handkerchief that is held closely between the teeth. In this way it has been advantageously used in many cases of cerebral disease.—*Archives Générales*. January, 1857.

ON ABSCESS IN THE APPENDIX VERMIFORMIS.

By Dr. LEWIS.

In this paper Dr. Lewis relates no instance that has occurred to himself, but furnishes an interesting analysis of the particulars of forty-seven cases of abscess or other disease of the appendix vermiformis, consequent upon the lodgment of foreign bodies there; cases which have already appeared in various periodical publications. The results of the analysis are thus stated: "So far as we have been able, by the records of cases, to determine the ages of patients suffering from this disease, they are as follows:—Under 5 years, 4; between 5 and 10, 2; between 10 and 20, 13; between 20 and 30, 6; between 30 and 40, 3; between 40 and 50, 4; between 50 and 60, 3; aged, 1; elderly, 1; young, 2. Only 8 of 44 patients whose sex was named were females. Of 18 it is recorded that their constitutions were good, and in 7 that they were delicate.

"We may draw the following conclusions, viz.: that neither age, sex, constitution, occupation or condition in life can exempt from the liability to this disease. Infancy, manhood,

and age are alike, though not with equal frequency, the victims of this relentless disease. It will be observed, according to our statement, that at least one-half of the patients suffering from it die under 20 years of age. Why infancy and youth are its favourite victims no evident reason can be assigned. Another fact in equal obscurity, and for which we can offer no explanation, is its more frequent occurrence in the male sex, the proportion being a little more than four-fifths. From the foregoing facts, we conclude that the hardy and robust are more frequently subject to this affection than those possessed of a frail and delicate organization; and also that those in the higher walks of life are equally liable to its attack with those occupying a more humble position."—*New York Journal*, Nov. 1856, p. 348.

ON THE STATE OF THE BREASTS IN PREGNANCY.

At a recent meeting of the Midwifery Section of the New York Academy of Medicine, Dr. Worster observed, that he considered too much reliance was usually placed on the condition of the breasts, as determining the existence of pregnancy. He referred to a case of disease of the cervix uteri, in which the breasts continued to enlarge until that malady had been remedied. Dr. Gardner agreed with Dr. Worster, and he has repeatedly treated patients whose breasts, in consequence of uterine disease, presented the appearances observed in gestation. While believing that the mammary signs are not peculiar to gestation, he holds that something more than simple amenorrhœa is required to produce them. He has also noticed that the areolæ are broader in pregnancy than when occurring in other conditions. Dr. Hubbard remarked that when, in addition to the enlargement the areolæ, and the prominent papillæ and nipples, he found the cuticle of the latter peeling off, and other signs corroborative, he did not, in ordinary cases, hesitate to pronounce his patient pregnant. Dr. Livingston stated that he had seen areolæ around the nipples of a virgin, attributable to masturbation, and in his examinations at the Dispensary he had frequently noticed elevated papillæ and scurf upon the nipples of girls of erotic temperament. In advanced phthisis, too, he believed we commonly find deeply-coloured areolæ, especially in women who have borne children. In this last observation Dr. Blakeman concurred; and his experience has taught him to be cautious in pronouncing a patient pregnant from the appearance of the breasts. The diagnostic value of the areolæ is greatly impaired by the fact that they vary so much, according to the age and complexion of the patient. Dr. Shanks stated that frequent excitement of the sexual passion, even when no uterine disease is present, will cause prominence of the nipples and papillæ. They are commonly well developed in prostitutes. Dr. Gardner added, that he had known the papillæ and nipples to project from temporary excitement, as from the examination of the Physician. Dr. Taylor remarked that, after the second or third month, he thought gestation could be determined with certainty in nearly all instances, from the appearance of the breasts. The areolæ were larger, and the papillæ more developed, than in uterine and ovarian diseases. If a case were examined at intervals, and the changes in the breasts were found to be more and more developed, there could be little doubt of the existence of pregnancy. He regarded the existence of moisture at the base of the nipples, and the peeling off from the sides, as important signs. He placed great reliance, too, on the appearance of inflation, known as Gregory's test, but these appearances are found in false conception as well as in normal pregnancy.—*New York Journal*, November, 1856, page 392.

EXCERPTA MINORA.

Partial Paralysis of Soft Palate.—Dr. Parker related the case of a lad of 19, who had recently suffered from slight inflammation of the throat, on the disappearance of which he speaks like one with fissured palate; drinks also regurgitating through the nose. The soft palate is unchanged in appearance. The lad suffers no pain, but has dimness of vision. Dr. Parker believes there to be paralysis of the motor branch of the fifth pair supplying the palate. Dr. Garrish related his own case. He had suffered from acute laryngitis, which was followed by regurgitation of fluids. He got better of this; but vertigo, dimness of vision, with muscæ volitantes and numbness of the extremities came on, these last symptoms still continuing.

New York Journal, Nov. 1856, p. 388.

Labour retarded by Short Funis.—Dr. Gardner related a case in which the presentation was favourable, the os was dilated, and the membranes were ruptured. During three days the head descended with the pains, but immediately receded. When the child at last was expelled it was found impossible to tie the funis until the placenta came away, as its length was only twelve inches. Dr. Taylor had seen in Paris a funis measuring only six inches.—*Ibid.* p. 395.

Injections in Dysentery.—Dr. Benedict stated that in many instances he had found the syrup of rhatany to answer better than starch and laudanum. His formula is, Syr. kramerizæ, ʒiii., tr. kino, ʒi. Dr. Foster considers the watery extract of opium dissolved in cold water (ʒj. in ʒi.) as the best injection, employing two or three grains at a time. For children from two to six drops of the solution in a teaspoonful of water is enough. The alcohol contained in laudanum injections often induces irritation enough to cause the whole to be expelled while, on the other hand, the starch may retard the action of the opium too long.—*Ibid.* p. 396.

Large Dose of Opium with impunity.—Dr. Hart related a case of severe otitis, in which a lotion, formed of a scruple of opium in a gill of boiling water, was swallowed by mistake. When called he found the lady wild, with contracted pupils, slow and difficult respiration, and slow and full pulse, sleepless, all pain having disappeared. As the time when an emetic could be expected to be beneficial had passed away, a pediluvium was ordered, together with cold applications to the head and a brisk cathartic. Under this treatment, followed by stimulants, the patient speedily recovered.—*New York Journal*, Nov. 1856, p. 397.

Applications for Weak Hair.—Professor Hadley, in a recent Report on the Chemical Composition of Hair Dyes, recommends the following application:—Castor oil, ʒvj.; alcohol, ʒxxvi.; tr. cantharid., ʒj.; ess. oils, ʒl½.—*Ibid.* p. 428.

Treatment of Simple Leucorrhœa.—In a great number of women, leucorrhœa is only the product of a catarrhal secretion, essentially connected with the lymphatic temperament, and debility of constitution. In such cases M. Nélaton prescribes as follows:—1. Inject into the vagina morning and evening a lotion composed of two parts of sulph. of copper to 500 of water. 2. Take internally cinchona wine with syrup of iodide of iron, twice daily. 3. A tonic regimen to be observed. 4. For the prevention of constipation take one-third of a grain of the alcoholic extract of belladonna every night.—*Union Méd.* 1857, No. ix.

GENERAL CORRESPONDENCE.

SPONTANEOUS CURE OF NÆVI MATERNI.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have been reading, in a late Number of your excellent Journal, Mr. Holmes Coote's observations on the "Spontaneous Cure of Nævi Materni," and beg to be permitted to add a few remarks on this subject, in the hope that the attention of the Profession having been called to this important fact, children may sometimes be spared operations which are often difficult, occasionally dangerous, and perhaps in many instances unnecessary. The fact that these growths may disappear spontaneously, and this after having attained a large size, is not new; it was stated many years ago by Mr. Wardrop ("Med. Chir. Trans." Vol. IX.), and has been recently reiterated by Professor Syme. It has been my lot to see, at least, two instances of nævi which had a similar termination. One made a deep impression upon me, and was as follows:—An infant was brought me during my hospital practice, with a large nævus on the side of the face, for which deligation of the carotid, it was said, had been recommended by high authority. As I had but recently tried this treatment in a like case with fatal results, I was indisposed to back the recommendation, and advised pressure in its stead. This could not be borne, and the growth was thenceforward left to itself. It at first increased, then became stationary, and afterwards dwindled away until it became almost imperceptible, even to the touch. These changes occupied many months. Since that time I have been in the habit of advising the removal of only such nævi (excepting a class to which I am about to refer) as are very small and easily extirpated, or

those which, from their anatomical character, appear to possess the more active elements of vitality and growth; and although I cannot say that in any one instance I have been able to affirm the spontaneous removal of the growth, I have in many satisfied myself that their persistence has been unattended with any harm to the child.

The class of excepted *nævi* to which I have just alluded has not, I think, been subjected to examination by Mr. Coote, or he would have shown, by histological proof, that they differ materially from those which he has so admirably described, and that with respect to them any anticipation of "spontaneous cure" can scarcely be for a moment indulged in. I refer to *nævi* which appear to consist not so much in dilated vessels as in a growth of vascular tissue among, and in the place of, normal tissue, generally subcutaneous, and met with in pale and unhealthy-looking infants. In attempting to remove a growth of this kind some years since, after reflecting the skin, I found that its boundaries were not defined, and that on tightening the ligature with which I had apparently surrounded its base, the tissue gave way and left a dark bleeding surface at the bottom of the wound. Blood, moreover, was observed to flow from portions of the tissue with which the surrounding structures seemed to be more or less infiltrated, as they happened to be more or less distant from the axis of the growth. I removed what I deemed advisable, or rather as much as I could, and closed the wound. The child was brought to me again after the lapse of some weeks; the wound had healed, but there was a re-appearance of the growth. This I removed, and took pains on this occasion to see that no particle of it remained behind. So far as I have since been informed the case did well.

There is one essential point in which this form of *nævus* and the *nævi* of Mr. Coote differ, viz., that it is not encysted. The ordinary *nævi* are, I believe, enclosed uniformly in cysts or capsules; these capsules thickening with the progress of their contained growths, by the constant addition of connective and other tissue to their external walls; and I cannot but think that their "spontaneous cure" is due to the check which these capsules put upon the further increase, and ultimately to the compression which they exert upon them.

In the paper already alluded to, Mr. Wardrop describes the growths alluded to by Mr. Coote as "subcutaneous *nævi*." The best account of that which I have endeavoured to describe is found in Vogel's Pathology, and is said to be the "true clean-giectasis, (a term which is, I think, a reproach to our science)." This writer says, "These *nævi* are non-malignant tumours, which consist principally of blood-vessels with small quantities of intermediate areolar tissue, are never encysted, but are intimately connected with the surrounding parts; . . . usually congenital, but afterwards increase in size." They are not to be confounded with the "cavernous textures" of Rokitsanski.

I hope I have said enough to draw the attention of Mr. Coote and other able investigators of dilated structure to this form of *nævus*. That the distinction between this and the *nævus* of Wardrop is a matter of much importance in a practical point of view, I think is very clear. Let each be clearly defined, and the rule of treatment is obvious. The capsular subcutaneous *nævus* might in all instances be regarded as susceptible of, and likely to succumb to, a process of spontaneous cure, at all events the opportunity should be given them; whereas, in the non-capsular form of the disease, the character of the tissue forbids our giving the same prognosis. The *nævi* of this class must be extirpated, and this with the most scrupulous care that no particle remain behind; moreover, no time should be lost in the performance of the operation.

I am, etc.

Finsbury-place South, Jan. 5, 1857.

JOHN GAY.

ASPHYXIA OF STILL-BORN INFANTS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have only just seen your report of the meeting of the Harveian Society of the 20th of November last, at which Dr. Marshall Hall read a paper on the asphyxia of still-born infants, and its treatment, which "may finally be thus briefly resumed in the form of rules."

1st. Place the fœtus on the face.

2nd. Sprinkle the general surface briskly with cold water.

3rd. Make gentle pressure on the back; remove it, and turn the infant on its side.

4th. Rub the limbs with gentle pressure, upwards.

5th. Repeat the sprinkling, only now with cold and hot water, of the temperature of 60°, and 100° Fahr. alternately.

6th. Continue these measures, or renew them, from time to time, even for hours. The embers of life may not be entirely extinct.

I coincide entirely in opinion with Dr. Ramsbotham, that whatever be the cause, the same means of resuscitation is applicable to them all, and the earlier artificial respiration is had recourse to, the greater will be the number of recoveries. So confident indeed am I of success, if the proper plan be adopted and diligently pursued, that the failures will be found the exceptions.

I never saw the air cells ruptured, or air pass into the stomach or intestines in such quantity as to impede the descent of the diaphragm, or interrupt the recovery.

I believe that the simple plan which I published in the *Medical Gazette* about thirty years ago, (which I have detailed below,) will be found not only more practical, but much more efficacious, than the elaborate treatment proposed by Dr. Marshall Hall.

"On the Resuscitation of Still-born Children.

"Cases of apparently still-born children are very common. The attempts to restore life are frequently ill directed, and not calculated to promote the object. It will be found that a very large proportion of children apparently dead born, may be resuscitated if proper means be resorted to, and persevered in for a sufficient length of time; but the modes generally employed to restore life, such as immersing the infant in warm water, friction, and pouring stimulants down the throat, are not at all calculated to produce the effect intended; and if these means do not succeed after a short trial, all further attempts are generally abandoned. The plan which I always adopt, which has never failed where the child was living during birth is very simple, and only requires perseverance." Here follow several cases of recovery under circumstances of great disadvantage, but the two following will be sufficient to illustrate the practice.

"Grace White, a very weakly woman, far advanced in consumption, was seized in the morning with uterine hæmorrhage, which continued slightly until the evening, when I saw her; and while standing by her bedside, the flooding increased with such violence, that I thought it best to deliver her immediately; the child was still-born. As soon as I had removed it from the mother, and seen her safe from immediate danger, I laid the child on its back in the nurse's lap, placed a napkin over its mouth, and, kneeling down, inflated its lungs through the mouth from my own, pressing out the air from the chest afterwards, and thus imitating natural respiration. After having continued this process for thirty-five minutes, the child made a very slight attempt to breathe, and the face became slightly suffused; by persevering ten minutes longer the free action of the lungs was established, and the child cried lustily.

"The next case was such as to encourage the attempt at resuscitation under any circumstances—it was a case of twins. The second child presented with the head, before which a considerable portion of the funis had descended. The delivery was extremely slow, from the general weakness of the woman, who had long been in a bad state of health; and the child was born apparently quite dead. As the mother's situation was very critical, more than half an hour had elapsed before I could attend to the child; and on inquiry I found it had been wrapped in a cloth, and placed on a chair in another room. I immediately made the attempt to restore it; and, by persevering steadily for twenty-five minutes, I had the satisfaction to see symptoms of returning life, and in about fifteen minutes more the child breathed freely.

"Everything in this last case was unfavourable to the restoration of the child: the mother's long-continued disease, the circumstance of her having two children, and more particularly the delay which took place before any attempt was made, during which time the child was exposed in a room without fire in the winter time, with a partial and very slight covering. I am warranted by my own experience in recommending the attempt to restore all still-born children who have been alive during the birth; and if the means of resuscitation above mentioned be actively employed and steadily persevered in, I believe the majority of cases will be successful. In all cases the restoration of a child is a most satisfactory circumstance, and, in some in-

stances, of the greatest possible consequence. I have never found anything but the regular inflation of the lungs necessary, which I do with my own mouth in the way I have described, and have generally observed the first symptom of returning life to be a tremulous motion of the respiratory organs; the child next makes a feeble attempt to inspire, and the colour of the face changes. The inflation should then be made more quickly; and, as the attempts to breathe increase, sal volatile or brandy rubbed on the palm of the hand and held over the mouth during the act of inspiration, will materially assist the recovery, and have a better effect than pouring stimulants into the stomach. A few smart slaps on the gluteal muscles will now complete the recovery." I am, &c.

Torquay, Jan. 13, 1857.

JONATHAN TOOGOOD.

SPASM OF THE GLOTTIS AFTER SUBMERSION.

[To the Editor of the Medical Times and Gazette.]

SIR,—I happened to witness on Friday last a serious accident, which took place on the Serpentine river; thanks to the exertions of the servants of the Royal Humane Society, there was fortunately no loss of life, still the sufferers exhibited such symptoms as may, perhaps, not be devoid of interest for the readers of your valuable paper. At five minutes past three o'clock, as I was near the Serpentine, I suddenly noticed three gentlemen in the water, the ice having just given way at a spot distant about thirty yards from the bridge on its east side, and not far from the middle of the river. The sufferers were struggling in vain to obtain a footing on the ice, when another gentleman came up, with the intention of impressing upon them the necessity of remaining quiet, holding to the ice with no more but their heads above water. As he approached the place, the ice broke and he was also immersed. About two minutes afterwards the Humane Society's apparatus was on the spot, and the four individuals seized its projecting ladder, but unfortunately, the ice being very thin, it was found impossible to drag the apparatus out of the water. A rope was consequently thrown to them, and they were thus all, one by one, rescued from their most perilous situation, the immersion having lasted about ten minutes.

The gentlemen were immediately taken to the Receiving-house of the Royal Humane Society, where I at once proceeded. They were undressed and placed in a warm bath at 80° for about a quarter of an hour; those whose circulation was still very languid I directed to be rubbed in the bath, the patients being directly afterwards put to bed, the frictions were continued, and a glass of brandy was given to each of them. In one case, which I shall presently allude to, it was found necessary to continue the frictions for upwards of an hour, administer a large quantity of brandy, use hot water bottles to the feet, a mustard poultice to the chest and another to the nostrils. I left the Receiving-house at half-past five o'clock, three of the patients having perfectly recovered, though still weak, and the fourth labouring under a great degree of prostration, but quite out of danger.

The patients on admission at the Receiving-house were all under a state of great prostration; respiration quick and short; pulse hardly felt at the wrist; cold shivers; face of a deadly pallor; and body, especially the extremities, quite cold. The first effect of the warm bath was to hurry the respiration, and then the circulation became gradually more active. On being removed from the bath there was a return of cold shivers, which gave way to energetic and continued friction with the hands; afterwards two of the patients slumbered, one slept, and the fourth continued in a very precarious condition for fully an hour and a half. In three cases there were symptoms of syncope from the excessive cold; in one case symptoms of syncope and asphyxia.

The gentleman last mentioned in the account of the accident as given above, was immersed in the water for a minute or two less than the others; he could swim, and appeared to have preserved all his presence of mind, and though I saw him disappear completely under water for a few seconds, still he suffered from no symptoms of asphyxia, and walked to the Receiving-house with but little assistance; his recovery was very rapid. Of the three other cases one exhibited most alarming symptoms. It appears that the individual in question had, in his attempts to take hold of the ladder, twisted round his neck a rope belonging to the apparatus, and was kept for some time with the head under water. His respira-

tion was comparatively free until placed in the bath, when an attack of spasmodic closure of the glottis occurred; a few minutes after being removed to a bed he was suddenly seized with a second similar fit, accompanied with severe symptoms of asphyxia; respiration was then next to completely arrested; the face became blue, with the tongue protruding; a very faint pulsation could be felt at the wrist; the thorax was arched forwards, the efforts to breathe being very distressing; there was also loss of consciousness, and slight convulsive motion of the arms. This attack lasted between eight and ten minutes, just enough air having been admitted at rare intervals to the lungs to keep up life during the time. When breathing returned there was slight delirium, with muttering of incoherent words, and then an indescribable expression of joy on the patient's face; but a few minutes afterwards a third similar attack occurred, though not so strong as the other, and he was subsequently seized a fourth time with the same symptoms, the fits being weaker on each occasion. During these paroxysms I had the patient supported in a sitting posture, and rubbed violently all over the body, which was easily done from the number of attendants present at the time. During the intervals between the fits he had brandy given to him and ether to smell, which afforded him much relief.

I did not apply the ether bottle to the nostrils of the patient during the fit, as it increased the distress on these occasions by exciting the respiratory action, without relieving the spasms of the glottis. As mentioned above, a mustard poultice was also placed on the chest. After a little more than an hour the attacks ceased, and the patient appeared much improved; he conversed with a friend, answered my questions, and gradually fell asleep. His pulse had then increased considerably in strength, and his respiration become quite free. He was in this state when I left the Receiving-house. I have ascertained since, that he has had no return of the fits, and is now doing quite well.

I believe that such spasmodic closures of the glottis after submersion are not uncommon; and I remember a dog I had brought to life after drowning by means of artificial respiration, which died some days afterwards from spasms of the glottis. In such cases, energetic frictions are very beneficial; but, if such means should fail, no other treatment is left than tracheotomy and artificial respiration, whether it be with the ready method of our distinguished countryman, Dr. Marshall Hall, or with an instrument such as that which I have described on a previous occasion. I am, &c.

W. MARCET, M.D.

36, Chapel-street, Belgrave-square (S.W.), Feb. 2, 1857.

P.S. The greatest credit is due to the superintendent of the Receiving-house, Mr. Williams, for his constantly having in readiness every means that may be available for the treatment of drowning, or of immersion in ice-cold water.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

JANUARY 27, 1857.

Mr. CÆSAR HAWKINS, President, in the Chair.

A paper was read by Mr. BRODHURST,

ON DISPLACEMENT OF THE SCAPULA UPWARDS THROUGH PARALYSIS OF THE SERRATUS MAGNUS MUSCLE, AND CONSEQUENT RETRACTION OF THE RHOMBOID, LEVATOR ANGULI SCAPULÆ AND TRAPEZIUS MUSCLES.

THE author read this to be a very rare affection. The patient was sixteen years of age, tall and robust. The right shoulder was two inches higher than the left, and the inferior angle of the right scapula was five inches higher than that of the left side. The postero-superior angle of the scapula projected immediately beneath the skin on the anterior surface of the neck, one inch and a half above the clavicle. Immediately above this point the trapezius formed a thick, prominent cushion. The serratus magnus muscle of the right side could not be distinguished even during forced inspiration. The motions of the right arm were limited—that is to say, the elbow could be raised only seven inches beyond a right line with the trunk,

and violent movements of this arm occasioned pain, in consequence of the projection of the scapula. Paralysis of the serratus magnus muscle had been produced when the patient was two years old, by her being caught by the arm when falling from the arms of a relative. Weakness of the limb was observed soon after the accident, and in the course of some months the shoulder was observed to be unduly prominent. A weight of five pounds was fastened upon the shoulder, and this was subsequently increased to eight pounds, which was worn during several years. The rhomboid muscles, the levator anguli scapulae, and portions of the trapezius muscles were tensely retracted. These muscles were divided subcutaneously, and after the fracture had healed, pressure was made above the spine of the scapula, to endeavour to depress that bone. This was so far successful that the normal position of the scapula was in great measure regained, the motions of the shoulder were rendered more free, and pain on motion was entirely removed.

Mr. LONSDALE expressed his doubts as to the correctness of Mr. Brodhurst's diagnosis and the efficacy of his treatment. So far as he (Mr. Lonsdale) could judge from the cast and drawings before the Society, he looked upon the case as one of spinal curvature in which the upper curve was concealed by the scapula.

A paper was then read by Dr. FULLER, on

FIVE CASES OF TRACHEOTOMY IN CROUP, WITH REMARKS ON CERTAIN POINTS CONNECTED WITH THE OPERATION.

The author began by narrating the particulars of five cases of inflammatory croup, for the relief of which tracheotomy was performed in St. George's Hospital. In each instance the operation was deferred until the last stage of the disease, when every remedy had failed, and death was imminent. In two of the cases the operation was successful in saving life; in three it failed of its object. Four of the patients coughed up a considerable quantity of mucus or false membrane through the artificial opening, and received immense relief from the operation; while the fifth was nearly moribund at the time of its performance, and expired almost immediately afterwards. Dr. Fuller remarked that the success thus obtained is highly satisfactory, and that, unless these recoveries are quite exceptional, tracheotomy ought to be had recourse to when other remedies have failed. He admitted, however, that the inferences derivable from such a limited number of cases are not of themselves sufficient to determine the propriety of the operation, and he therefore proceeded to discuss the question generally, and endeavoured to bring together such facts as should lead to a decision—1st, as to whether the operation of tracheotomy is justifiable in any case of croup? 2nd, if so, under what conditions, and at what stage of the complaint? 3rd, whether the existence of certain symptoms or other circumstances ought not to cause us to hesitate in recommending its performance? 4th, whether any, and what medical treatment is necessary after an opening has been made into the trachea? With a view to a correct appreciation of the subject, Dr. Fuller began by referring to the difference existing physiologically and pathologically between idiopathic inflammatory croup and the diphtheritic form of the disease which commonly prevails in France, and he pointed out that the objection usually urged against French statistics of tracheotomy in croup—viz., that diphtheritic cases are much more favourable for the performance of the operation than are the croup cases usually met with in this country—has no foundation in fact. He called attention to the circumstance that diphtheritis is often accompanied by glandular swellings in the neck, and œdematous fulness of the throat, whereby the operation is rendered much more difficult than in inflammatory croup, and that the type of the accompanying fever is so low as often to destroy life, quite independently of any affection of the air-passages. He then proceeded to show, by reference to 483 cases in which tracheotomy had been performed for the relief of croup in France, that the operation has proved eminently successful in the hands of French Surgeons; and he reminded the Society that, inasmuch as the condition of the throat externally, and the nature of the accompanying fever in diphtheritis are by no means favourable to the operation, the success which has attended it can be explained away only on the supposition, often put forward by English writers, that in France the disease seldom extends into the trachea and bronchi, and is rarely accompanied by bronchitis or pneumonia. The fallacy of this supposition he then proceeded to demonstrate by reference to the writings of

French authors, and to the recorded results of the post-mortem investigation of 311 fatal cases of croup in France, and he showed that in regard to its pathological effects, diphtheritis, when accompanied by croupal symptoms, does not, as compared with inflammatory croup, present any greater prospect of success for the operation than it does in the character of its accompanying fever, or the condition of the throat externally. Having thus established the success of the operation in the hands of French Surgeons, and the absence of any special cause for that success, Dr. Fuller proceeded to inquire into the circumstances which have led to the disrepute of the operation in England. These he traced to theoretical objections founded on the pathological results of the disease, to the almost unanimous and unqualified condemnation of the operation pronounced by successive English writers, and to the ill success which had attended the operation in the few cases in which it had been practised prior to the publication of their respective works. He insisted, however, that theoretical objections are of little value as compared with the results of practical experience, and he therefore appealed to that source for information on the subject. He showed, by reference to statistics derived from the Hôpital des Enfants Malades at Paris, that whereas out of the first hundred cases operated on at that institution one only recovered, a more extended experience in the mode of performing the operation, in the precautions requisite to ensure success, and in the carrying out of the necessary after-treatment, has led, since 1850, to the saving of 47 out of 215 cases; or, in other words, to the rescuing from death of nearly one out of every four patients. He argued thence against those persons in this country who condemn the operation simply because it is opposed to their preconceived notions, or has proved unsuccessful in the few instances of which they are personally cognizant. Further, he showed that even in Great Britain the recorded results of the operation afford a fair amount of success. Twenty-two cases only have been recorded in England, and in no less than eight of these life was saved by the operation; and although, doubtless, many unsuccessful cases have occurred which have not been placed on record, still Dr. Fuller argued that if life can be saved by operative interference, even in a small proportion of instances, the chance afforded by the operation ought not to be withheld where all other means have failed, except under some peculiar circumstances. Dr. Fuller next proceeded to dispute the propriety of having recourse to tracheotomy at an early stage of the disease. He showed that patients in the second stage of croup will sometimes recover under proper medical treatment, even when those symptoms appear to be desperate; and, on the other hand, that the theoretical objections commonly urged against deferring the performance of tracheotomy until the third stage of the disease, have no foundation in fact. In proof of this, he appealed to the results of the five cases which have fallen under his own observation at St. George's Hospital, as also of many of the other cases on record; and, further, to the corroborative evidence afforded by the recent change of opinion evinced by MM. Trousseau, Bretonneau, and others who formerly were most zealous in their advocacy of an early performance of the operation, and who now defer it until a much later stage. Dr. Fuller condemned the indiscriminate performance of tracheotomy in croup. So much danger and difficulty attends the operation, even in favourable cases, that he considers it almost necessarily fatal if the patient is of very tender age, or has been out of health prior to his attack of croup; if his illness has been preceded by pneumonia or severe bronchitis; if he is suffering from any exanthematous or other disorder; and, further, if he is in such a position of life that his parents are unable to secure for him proper skilled attendance night and day. He spoke of the gradual sinking sometimes observed in fatal cases, many hours after the operation, whilst all the symptoms are progressing favourably, as analogous to the sinking which occasionally takes place, under similar circumstances, in persons who have been partially asphyxiated; and he attributed it in part to pulmonary collapse, and in part to nervous exhaustion consequent on the long-continued struggles for breath. He referred to the use of tracheal tubes of too small a calibre, or of improper construction, as one great cause of the failure of the operation; and, as another, to the neglect of proper after-treatment, or to the administration of improper remedies. He pointed out that, in almost all the fatal cases on record, wine and brandy had formed

the chief, if not the sole, medicaments; whereas, in almost all the successful cases, calomel, antimony, and the measures which are considered useful before the operation, were steadily persevered in afterwards; and he called attention to the fact, that the depression which accompanies the last stage of the disease, in which alone he recommends the operation, is the depression of asphyxia, which is to be relieved by the free admission of air, and not by the administration of stimulants. He recommended that the trachea tubes be made somewhat larger, shorter, and less curved than those in common use; that the outer canula be shorter than the inner one, and that both be of the same diameter from one end to the other, but that the outer one, instead of being made of one piece as at present, should be divided longitudinally into two blades, flattened towards their inferior extremity, so as to come into close apposition, and to admit of easy introduction into the trachea. These blades should be made to open like the blades of a dilating bivalve speculum, so as to admit, when fully expanded, an inner tube of uniform diameter throughout. This arrangement could not only conduce to keeping the inner tube clear of mucus, but would render serious obstruction to the respiration well nigh impossible, inasmuch as if the inner tube were to be clogged in any way, and the extremity of the outer canula were to be also choked with mucus, the chink existing between its expanded blades would provide a free passage of air immediately on the withdrawal of the inner tube.

Dr. WEST observed that he must beg to set Dr. Fuller right with reference to the opinions which he, Dr. West, had expressed in the published lectures concerning the operation of tracheotomy. So far from being an opponent of it, he had ventured to dissent from authorities high as Dr. Cheyne and Mr. Porter, and to advocate its adoption most decidedly. At the same time his own personal experience of the operation, amounting to about ten cases, and that likewise obtained by his colleagues at the Children's Hospital, had not yet afforded a single instance of recovery. At the Children's Hospital every possible attention was paid to the circumstances in which the child was placed after the operation, while its performance was not delayed till the case was hopeless, but was performed comparatively early: and appropriate antiphlogistic treatment, including the employment of mercurials, was sedulously continued afterwards. He still believed that the difference in the character of the disease in England and France had much to do with the different results of tracheotomy in the two countries; and his own experience was that the cases of croup in this country, in which the affection of the larynx was unattended either by bronchitis or pneumonia, were a minority and a very small minority of the total number. With reference to the suggestion as to the importance of the canula being of larger size than that which is frequently employed, it was no doubt a matter of great moment; but it had already been insisted on, and the grounds for it fully explained, by M. Trousseau, of Paris, whose remarks on the subject were quoted by the speaker.

Dr. WEBSTER remarked that the age of children had an important influence on the result of tracheotomy in croup. The successful cases referred to by Dr. Fuller were in girls past the age of infancy. In children of very tender age the result would be less likely to be satisfactory.

Dr. FULLER briefly replied, and the Society adjourned.

THE PATHOLOGICAL SOCIETY.

TUESDAY, January 20, 1857.

(Continued from page 127.)

Mr. WATSON, President, in the Chair.

Dr. SIBSON showed a specimen of

PERFORATING ULCER OF THE STOMACH.

The disease was believed to be cancerous, but with the microscope the elements only of fibroid induration had been found in its edges. The perforation was in the posterior part of the viscus, and a large mass of induration existed behind it. Death had occurred from escape of the contents into the peritoneum.

Dr. BRINTON stated, that on looking at the preparation he felt little doubt but that the disease was a simple chronic ulcer. The induration behind it was, he believed, the ad-

herent head of the pancreas. He suggested that the specimen should be referred to a committee for report, as he felt strongly that it was not cancerous, as had been described. Having paid much attention to these diseases, he might add that the perforation was in one of the most usual situations, and that what was not at all infrequent appeared to have occurred, namely, that the perforation of the stomach coats had at first not led to extravasation, a circumscribed cavity having been formed by the adherence of adjacent parts. The final and fatal rupture had been of the walls of this secondary cavity.

Dr. SIBSON thought it very likely that Dr. Brinton's opinion would prove correct. He had not found any cancerous elements in the edges of the ulcer, and had designated the specimen as malignant perhaps somewhat inadvertently. He should be glad that the specimen should be further examined.

The PRESIDENT then named Dr. Brinton and Mr. Hutchinson as a committee to examine and report upon it.

Mr. HUTCHINSON next exhibited, on behalf of Mr. Joseph Allen of the Liverpool Royal Infirmary, a specimen of

LARGE TUBERCULOUS ABSCESS IN THE CAVITY OF THE UTERUS.

The organ had been removed by Mr. Allen from the body of a girl aged 15, who had died of albumenuria, etc., in the Liverpool Royal Infirmary. No uterine symptoms had been manifest during life. The liver and kidneys were found extensively degenerated. In the lungs were numerous miliary tubercles, and crude tubercle was also found in the false bands uniting the layers of pleura. The body of the uterus was distended into a sac capable of containing about two drachms, the bulging being greatest on the right side. The os internum was occluded, the canal of the cervix being quite healthy. The body of the organ was filled with a yellow, thick opaque fluid, resembling pus mixed with softened tubercle. Under the microscope this fluid showed, not the round plump cells of pus, but shrivelled and mis-shapen ones like those of crude tubercle, and vast quantities of oil globules with much granular matter. There was no acute inflammation of the uterine walls, but in parts they were congested and softer than natural. In the left Fallopian tube were three or four small masses of crude tubercle, from the size of a shot to that of a pea. Mr. Hutchinson adverted to the great rarity of tuberculous deposit in the uterine organs, especially in the uterus itself.

Dr. QUAIN presented a specimen of

LARGE ENCEPHALOID MASS SURROUNDING THE ROOT OF THE LEFT LUNG.

The mass, which was about the size and shape of a large cocoa-nut flattened, and of irregular outline, was situated between the root of the left lung and the heart. In its aspect it greatly resembled brain tissue, but was more resistant to the touch, and more gritty to the knife. It yielded a copious cream-like juice. The microscope showed its structure to be composed of well-formed variously shaped polynucleated cells of granular matter, of many compound granular or "mulberry-like cells," of a delicate stroma, forming variously shaped interspaces and of numerous blood-vessels. The tumour compressed the branches and all the blood-vessels of the lung. It had passed into the lung tissue, forming there several masses, varying in size from a pea to a small egg, some of which projected above the level of the pleura. The left pleural cavity contained about three or four pints of blood-tinted serum. This was clearly the result of pressure on the blood-vessels of the lung, for there was no evidence save of slight pleurisy, and this on the surface of the diaphragm. The other organs of the body were healthy. There was some rough white deposit on the visceral pericardium, the result of a former pericarditis. There was no glandular enlargement anywhere.

The specimen had been taken from a warehouseman, aged 27, who was admitted into the Brompton Hospital, under Dr. Quain's care, (Dr. John Sibbald, the reporter of the case, being clinical assistant), on the 8th of December. He dated his illness from a slight febrile attack, which occurred six months previously, and which left him in possession of a short dry cough. Three months ago he observed his breathing become shorter, his appetite, his strength, and flesh to fail. His cough increased and he expectorated with difficulty a tenacious, glairy mucous, but never blood. In this state he was admitted to the hospital. His sallow, cachectic, sorrowful expression was remarked; and it was observed that he could

lie in any position, but he coughed most when on his back. There were no other peculiarities worth noticing. An examination of the chest showed the right lung to be healthy. Over the whole of the left side there was marked dulness. The mobility was greatly diminished. The side was by half an inch fuller than its opposite. There was feeble bronchial breathing over the apex of the lung before and behind. There was also a feeble breath sound audible at the base behind, but not in front. The heart was but little displaced. Over it there was a distinct but limited friction sound, and in certain positions of the patient there was also a pleural friction sound. After a short stay in the hospital the signs of effusion increased—the heart was much displaced towards the right side—the respiratory and friction sounds disappeared, and there was heard with the first sound of the heart an endocardiacal murmur. The patient's weight increased by two pounds. Blisters, mild mercurials, and iodide of potassium were administered without material influence. The question of tapping the chest was debated in consultation, but the conviction that solidification of the lung existed as well as effusion forbade the idea. The symptoms got worse rapidly on the 17th of January, and he died on the 19th. The breathing over the apex of the lung was observed by Dr. Sibbald at this time to be of a more bronchial and metallic character than previously. This case was of especial interest in connexion with a specimen of like disease presented by Dr. Quain, at a meeting during the present session. The tumour in that instance was not a sixth part of the size of the present specimen, but being situated a few inches nearer the median line, pressed on the œsophagus, the aorta and the bronchus giving, by obstructing the functions of these canals, most unmistakeable signs of its presence, and finally producing death by starvation.

Dr. PEACOCK exhibited a specimen of

A LARGE ANEURISM OF THE ASCENDING AORTA, WHICH PRESSED UPON THE RIGHT AURICLE AND VENTRICLE.

This preparation was removed from the body of a Hastings boatman, aged 42, who had been a patient of Dr. Barnard and Dr. Stevenson. For the opportunity of examining and exhibiting the specimen Dr. Peacock was indebted to Mr. Penhall. The patient was first seized after a hard day's work, about two years before his death, with pain in the left side of the chest and difficulty of breathing, and, though he became better, he was never again entirely well. Latterly he had suffered from aggravated symptoms of cardiac asthma, with anasarca and hydrothorax.

The aneurism originated by an oval aperture, about an inch in diameter, from the right side of the aorta, immediately above the aortic valves. From this point the sac spread out, forming a large cavity, and pressed inferiorly upon the base of the right ventricle and posteriorly upon the right auricle. The sac was covered externally by the adherent pericardium; its walls contained several large bony plates, and internally it was lined by a rough and irregular membrane, and contained in places partially developed coagula.

The pericardium adhered to the heart everywhere, except towards the apex; and where it was adherent there was a wide and thick plate of bone which entirely encrusted the heart. The heart was generally, but not very considerably, hypertrophied.

Dr. PEACOCK also exhibited a specimen of

MITRAL VALVULAR DISEASE.

This specimen was removed from a boy 19 years of age, who was admitted into the Victoria Park Hospital with symptoms of bronchitis and mitral valvular disease in November. He died on the 11th of the present month. He had extreme difficulty of breathing, and a loud murmur was audible with the systole, most distinctly beneath the nipple. Latterly he was very anasarcaous; the liver was greatly engorged, the urine contained albumen, and he expectorated blood. The mitral valves were thickened and indurated, and the aperture was permanently open, and so much contracted as only to give passage to a ball 24 French lines in circumference. The heart was generally hypertrophied, and its cavities dilated. It weighed 20½ ounces.

Mr. PART presented a specimen of

CANCEROUS ULCERATION OF THE COLON, AT ITS HEPATIC FLEXURE,

in which the intestine was narrowed so as scarcely to admit

the end of the little finger. The ascending colon was much distended with flatus, and its coats enormously hypertrophied. The peritoneal covering of the intestine had given way in two spots on the anterior surface, where adhesions had been contracted with the omentum. The small intestines were also greatly enlarged, and the coats hypertrophied and filled with feculent matter. The patient, a medical man, had been obliged to relinquish his duties from some heart affection originally, but during the last year he had suffered from frequent attacks of colic, attended by a large resonant and very painful tumour on the right side of the abdomen, sometimes in the situation of the caput coli, and at others high up. The attacks supervened upon a constipated condition of the bowels, and upon eating any indigestible substance.

Mr. PART also presented a

CASE OF EXTENSIVE OSSEOUS DEPOSIT WITHIN THE MITRAL VALVE

from a patient, aged 42, who had died with hydrothorax on the left side and an old adhesion on the right. She had had acute rheumatism twenty-five years before her death, and four years previously to death she had had pleurisy.

Mr. PART also showed an interesting specimen of

ULCERATION OF THE ŒSOPHAGUS COMMUNICATING WITH THE RIGHT BRONCHUS.

A gentleman, aged 62, had had a severe hæmatemesis nine months before his death. About five months and a half after this attack, he had, while suffering from severe dyspeptic symptoms with dysphagia, a second very severe seizure. This was followed by others at shorter intervals. He gradually became more unable to swallow, until even fluids were, after five or six seconds, returned. Six weeks before death he had bronchitis, after which blood was sometimes coughed up, and what little food he took into his mouth was returned by coughing, and he died on the 3rd of January. Examination after death showed the liver in a state of cirrhosis, the other abdominal viscera healthy. In the chest a large quantity of offensive ash-coloured pus was found in the right pleural cavity. At a point corresponding to the bifurcation of the trachea, the anterior wall of the œsophagus presented a rough jagged ulcer, about two inches in length, and embracing two-thirds of the circumference of the tube; from this there was a communication with the right bronchus, and with an ulcer as large as a small walnut, with substance of the lung at its root. The coats of the aorta were untouched by the disease, which had spread to close proximity with the left bronchus.

Dr. JENNER presented to the Society a specimen of

LARGE AND OLD CLOT IN THE HEART.

The preparations shown included the heart, lung, and kidneys of a boy, aged seven years and six months, who died while under his care in the Hospital for Sick Children. When admitted some months since he was suffering from albumenuria, anasarca, effusion into both pleuræ, pericardium, and peritoneum. After death the heart was found to contain old clots in the appendix of the right and left auricles, a small old clot in the right ventricle, and a very large old clot in the left ventricle. This latter clot filled nearly half the ventricle; it was almost inextricably interlaced among the columnæ carneæ, at and near to the apex, it was in no way connected to the valves. The valves were quite healthy. In one of the kidneys was a large yellow deposit, such as are common in endocarditis, and which are now known to be the consequence of the circulation of minute portions of fibrine with the blood, and their arrest in the minute arteries or capillaries. In this case Dr. Jenner remarked the portions of fibrine were evidently washed away from the old clot in the left ventricle. The lung offered a fine specimen of pulmonary apoplexy, due, Dr. Jenner supposed, to its most common determining cause, viz., obstruction to the free passage of the blood through the left side of the heart.

Mr. JOHN WOOD exhibited

A PORTION OF SMALL INTESTINE PASSED PER ANUM, AFTER SYMPTOMS OF OBSTRUCTION.

This specimen was sent to Mr. Way, House-surgeon to King's College Hospital, by Mr. Ward, of Bodmin, in whose practice the case had occurred. The patient was a married female, aged 23, who, 6 months before, had become subject to severe pains in the loins and abdomen. The case had been mistaken and treated for disease of the womb. When Mr. Ward saw her, she was much emaciated, with a quick, feeble, and occasionally intermittent pulse, a dry furred

tongue, and bowels apt to be, but not completely constipated. Faeces natural in appearance. Micturition frequent and painful, urine slightly albuminous and containing lithates. She vomited frequently matters not distinctly faecal, but consisting apparently of partially digested food; the vomiting generally coming on about an hour after eating. Had much griping pain in the bowels, with some pain on pressure over the right kidney. No uterine disease was detected beyond a little thickening of the os. In November last, the patient passed the produced portion of small intestine. It was about 6 or 7 inches long, and an inch and a half in diameter, showing no valvulae conniventes, or any evident Peyer's patches, and was probably from the upper end of the ileum. The mesentery was separated close to the gut, and one end of the latter considerably frayed off, the other being cleanly divided. The patient at first went on well, but more lately has had a return of the symptoms of intestinal strangulation, with constant vomiting and scanty fluid dejections, possibly arising from contraction of the resulting cicatrix.

ARMY MEDICAL AND SURGICAL SOCIETY.

JANUARY 3.

Dr. ANDREW SMITH, President, in the chair.

Staff-Surgeon MACGREGOR read a paper on

RECRUITING STATISTICS,

founded on the annual returns received from the recruiting districts of Great Britain and Ireland for the last 13 years, with a short account of the present condition of recruiting, and some remarks on recent instructions in connexion with the register in use in the above districts. After some introductory observations, Mr. MacGregor stated that primary recruiting was much in abeyance at the present time, and that it was destined to be still further depressed in proportion to the success of volunteering in the class of supernumeraries of certain portions of the army. He showed tables illustrative of all these points; in fact the whole paper was based on a profusion of tables bearing reference to the subjects usually included in the consideration of vital statistics. The tables illustrated such questions as the following; viz. the proportion of rejections to candidates for admission into the army; the same according to districts; the proportions of admissions according to districts; the proportions according to occupation; native countries; population of such country; intelligence, causes of rejection, age, height, weight, &c. The general substance may be shortly expressed in the following summary:—The general proportion of rejections to be examined for 11 years before the war was 34 per cent. on one-third. During the two years of the war, it was 23 per cent. Since the peace it has again risen to 34 per cent. By the kindness of Dr. Balfour, an opportunity is afforded of comparing these proportions with that of a period of 10 years immediately before that contemplated in the paper, by which it appears that 30 per cent. was the average from 1832 to 1841. The same kindness enables us to compare the English results with that of the French army from 1831 to 1843, and, curious to say, the exemptions from serving in the ranks amounted to 30 per cent. also. Thus the two services, although acting from opposite principles, arrive at nearly the same ratio. Among the exemptions in the French service, over and above the preceding, are enumerated 8 per cent. for under size. Now, the limits of under size in France is 5 feet 1 inch; while in England it is 5 feet 6 inches, and all who are under that height are not admissible for the Medical examinations. During the two years of the war it was estimated, by the tables submitted, that more than one half of the recruits of the British army were between the heights of 5 feet 6 inches and 5 feet 4 inches for the rank and file; and, for the two special corps, viz., the Medical Staff Corps and Land Transport Corps, candidates were eligible as low as 5 feet 2 inches. The effect of this wider field of selection was, to secure a greater proportion of recruits than was customary when the limits were stricter. It appeared from a table produced, that 73 per cent., or nearly three-fourths of the French army, was under the standard height of the British. In the latter, the joint effect of the reduction of the standard of heights, and of the increase of the age from 25 to 30 years, and even, in certain cases, to

35 years and upwards, was to increase the reproductiveness of the examination by 11 per cent. during the war period. With reference to age, the paper showed that one-seventh of the whole of the recruits were over 25 years of age. In 1851, the proportion of lads of 21 years and under was 71 per cent.; but, in consequence of the judicious relaxations subsequently made, the proportion in the second year fell to 40 per cent., while that between 21 and 30 years rose to 50 per cent. There were 10 per cent. whose ages ranged from 52 to 30. There were, however, special cases—old soldiers re-enlisting, armourers, musicians, artizans, land transport men, and storekeepers, etc. Mr. MacGregor pointed out many interesting facts connected with the peculiarities of the different recruiting districts as recruiting fields. London was the most productive, as its proportion was 26 per cent. of the whole enlisted, or about one-quarter; while the other districts seldom averaged more than one-eighth. With reference to the native countries of recruits, he showed that Scotland and Ireland, relatively to their populations, supplied a greater amount of soldiers than England; but that, during the war, the latter appeared to have roused herself in an unusual degree, having risen from 313 per million to 1523 per million as against Scotland for the same periods, when its proportions were respectively 1160 and 2513. With reference to intelligence, it appeared that out of the recruits passed at the London District during the present year, 83 per cent. were able to read, and 78 per cent. to write more or less. With reference to weights a table was produced, showing the weights of 648 recruits admitted into the service, according to ages, and according to ages and heights. The average weight of the whole was 134 pounds 5 ounces, or 9 stone 8 pounds 5 ounces. Comparing the weight with that of a regiment of Bengal Native Infantry and of Madras Native Infantry, the advantage was greatly in favour of our recruits. The latter were respectively 129 pounds, or 9 stone 3 pounds, and 111 pounds, or under 8 stone. The weights of recruits according to ages advanced progressively as follows:—18 yrs., 129 lbs.; 19 yrs., 132 lbs.; 20 yrs., 135 lbs.; 21 yrs., 137 lbs.; 22 yrs., 139 lbs. 3 oz.; 23 yrs., 139 lbs. 7 oz.; 24 yrs., 135 lbs.; 25 yrs., 141 lbs. We have no further space to refer to his remarks on the recent instructions issued to the Staff of Recruiting Districts. They may briefly be stated to have a tendency to render the registers more complete than hitherto.

Dr. BALFOUR remarked, that there was an omission which seriously impaired the importance, and rendered of little value some of the statistical results arrived at by the author. The official returns did not furnish the relative proportions of primary and secondary inspections. He illustrated this point by reference to statistical results of primary and secondary inspection for several years in the various districts. Thus, it was shown, in the work of the late Dr. Marshall, that in Dublin, during the 12 years, 1826 to 1837, the ratio of rejection was 423 per 1000 of the primary, and only 124 per 1000 of the secondary inspections. In Edinburgh, in the 5 years, 1833 to 1837, it was 485 and 135; and in London during the same period, 387 and 185 per 1000. The proportion of secondary inspections in Dublin, during the period before referred to, was 341 per 1000; in Edinburgh, 145; and in London, 184. During three months in (London) 1838, the time of the Canada Rebellion, when recruiting was active, the secondary inspections amounted to 320 per 1000. From this it must be obvious, in districts where there was a large proportion of secondary inspections, the rate of rejections would be relatively low, and this might probably explain the very favourable results in some of the Irish districts. He states the rejections in the French army, during a period of 13 years, viz., 1831 to 1843, amounted to 298 per 1000. There is one other point in the paper to which he would advert—viz., the minimum size of chest in an eligible recruit was stated by Mr. MacGregor to be 32 inches; he (Dr. Balfour) himself had measured carefully 1439, and found the average to be 32½; while he considers 30 inches as the minimum.

Mr. MOVAT observed, he could not pretend to the experience of the gentleman who preceded him, or the able author of the paper; but as reference had been made to the class of recruits, their age, height, etc., sent out to the East during the war period, he might be permitted to state that the results of the late campaign, although the army only marched a few miles, had confirmed the opinion that men of large stature are ordinarily the first to fail under fatigues. Medical officers know from observation, that they commonly suffer from diseases in

greater proportion than others. Mr. M'Gregor has drawn particular attention to the weight and bulk of recruits. The French, it is well known, are below the medium standard height of Europe, and inferior in bulk; yet no one can fail to have observed the comparative ease with which these small men carried weights under which the stalwart British broke down. It appears, then, that height has not so much to do with strength as is generally supposed; and the practical inference to be deduced from this fact is, that men of low or middle stature are best adapted for the purposes of war. There is a still more important inference to be drawn from our experience, to which the author has adverted, viz., the age at which men are best fitted for useful soldiers. More than half a century ago the great Napoleon wrote to the National Assembly, complaining of the raw material of his army, saying, "I want men, not boys, who only encumber the time of march and fill the hospitals." The same circumstances were painfully experienced in the Crimea, 71 per cent. of the war levies being mere youths, who, as well as the old men—witness the Ambulance Corps and Land Transport—broke down and filled the hospitals. The only remedy for this evil, as our army is constituted, is the permanent embodiment of the Militia, from which to draw ready-made and efficient soldiers when war breaks out. So far as my experience goes, 22 is the best age for a soldier to commence his active duties, and 35 the maximum. Any one who has served in the tropics must have observed the injurious effects of climate upon young recruits, who ought never to be sent either on tropical or field-service until fully developed and thoroughly fit for all the duties required of them. With reference to the capacity of chest referred to by Dr. Balfour, he, Mr. Mouat, had likewise made measurements in one regiment, the 9th, and found the mean average to be also 18.33 inches. He had observed as low as 28 inches, and as high as 43. Of the spirometer he had no practical experience.

Dr. F. REID was of opinion that notwithstanding the exception that had been taken thereto, the returns of rejections were on the whole tolerably accurate—one district balancing another; and that it was worthy of remark that on the extended observation of a series of years the proportion of rejected to fit men in the aggregate of all the districts was very nearly the same, year after year. It had been next to impossible to arrive at strict accuracy in respect of recruits rejected in the country, seeing no returns had been received from private practitioners of the men rejected by them. Dr. R. made some observations relative to the fallacies attaching to the use of the spirometer in the examination of recruits; very different results being shown therewith by the stout but awkward countryman, as contrasted with sharp townsmen, who had the knack of using the instrument to advantage. He further alluded to some other interesting points connected with the subject of recruiting, and especially to the amount of intelligence and education of different classes of recruits, &c.

Mr. WYATT could quite corroborate the remarks made by Dr. Reid regarding the fallacious results attained from the first application of the spirometer in young recruits, when first subjected to Medical inspection. In his opinion, until the subject was in a measure educated to its use, no true indication could be afforded regarding the actual capacity of the chest. The author's paper was most interesting. If materials could be obtained from Chatham, most important deductions would be arrived at regarding the age and previous employment best suited for making effective soldiers. His experience of service in the Crimea was, that no man should be sent on active service under twenty-four years of age.

The Society then separated.

The following paper was announced, by the President, for discussion at the ensuing meeting:—"Injuries of the Head, with remarks by Dr. Jephson, Surgeon, King's Dragoon Guards."

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS.—WEDNESDAY, Feb. 4.

Mr. E. BALL presented a petition from Medical officers, praying for relief from the Poor-law restriction.

THURSDAY, Feb. 5.

MEDICAL RELIEF.—Mr. RICE asked the President of the Poor-law Board if it was his intention to propose, during the

present session, any measure on the subject of medical relief. Mr. BOUVERIE said he had no intention of bringing in such a bill.

POISONOUS DRUGS.—Mr. BRADY asked the Secretary of State for the Home Department, if it is the intention of her Majesty's government to introduce any measure this session for the better regulation of the sale of poisonous drugs.

Sir G. GREY said it was his intention to bring in such a bill; indeed, the bill had been prepared (cheers).

MEDICAL NEWS.

DEATHS.

AMPHLETT.—January 28, Samuel Holenden Amphlett, Esq., Surgeon to the General Hospital, Birmingham; M.R.C.S.E. 1834; F.R.A.S. (Hon.) 1843; L.S.A. 1834.

DAWSON.—Jan. 22, John Dawson, Esq., Surgeon, of Tolleshunt D'Arcy, Essex, aged 47, much respected. M.R.C.S.E., 1834; L.S.A.

MACEWAN.—January 26, at Pitt-street, Glasgow, John Macewan, Esq., M.D., after a few days' illness, of acute bronchitis.—*Edinburgh Daily Express*.

M'EWAN.—Jan. 28, at Newton-street, Glasgow, Andrew M'Ewan, Esq., Surgeon.—*Edinburgh Daily Express*.

SIMONS.—January 20, at Birmingham, John Simons, Esq., Surgeon, aged 46. M.R.C.S.E. 1843; L.S.A. 1843.

TAYLOR.—January 21, at Ashton-under-Lyne, aged 31 years, Mallallieu Taylor, M.D. Edin. 1847; L.R.C.S. Edin. 1847; and L.A.C.

BEQUESTS.

JOHN HEWETSON, Esq., of Woburn-square, has bequeathed £100 each to the London and King's College Hospitals.

TESTIMONIAL.

On the departure of H. W. Mahon, Esq., Surgeon R.N., from Otahuhu, in New Zealand, a complimentary farewell address was presented to him by the enrolled pensioners.

THE LATE DR. PARIS.—The personal estate of Dr. Paris has been sworn under £10,000.

THE ROYAL LONDON OPHTHALMIC HOSPITAL.—Messrs. Tyrrell, Hutchinson, and Hultre, have been appointed by the Committee as Clinical Assistants to Messrs. Dixon, Critchett, and Bowman, at the Moorfields Hospital.

MONTHYON AND CUVIER PRIZES.—At the annual meeting on Monday, one of the Monthyon prizes for discoveries in Medicine and Surgery was granted to Dr. Simpson for his successful use of chloroform in surgical operations and accouchements. The Cuvier prize was accorded to Professor Owen, for having, by his labours during twenty years, so greatly enlarged the field of comparative anatomy and palæontology.

EDINBURGH MEDICAL MISSIONARY SOCIETY.—The annual meeting of this Society was held on Thursday. The income of the Society during the past year has been £715 12s. and the expenditure £698 4s—leaving a balance of £17 8s. at the credit of the Society. The amount of their balance at the Bank, which was last year £773, was thus increased to £791 8s. Several resolutions relating to future progress were passed, and the meeting separated.

MONUMENT TO MEDICAL OFFICERS OF THE ARMY WHO LOST THEIR LIVES DURING THE LATE WAR.—A special meeting of the Committee appointed to carry out the above design assembled at the Army Medical Board, Whitehall-yard, on Saturday the 17th inst., when the sum of £523 1s. was announced to have been received; which, with a few exceptions, had been subscribed by the army medical officers themselves, the sum of £327 having been remitted by the survivors while serving in the Crimea, and the residue of £196 1s. has been contributed in England. A supplemental list will hereafter be published, containing the names of contributors, and the amount subscribed, in addition to the list which has already been circulated. Subscriptions continue to be received by Messrs. Mac Grigor, the army agents, and by John Wimbridge, Esq., at the Army Medical Board. JOHN WYATT, Coldstream Guards, *Hon. Sec.*

ÆSCULAPIUS THE SON OF APOLLO.—It is said that the great Boerhaave was more proud of his success as a flutist than of his scientific glories. Haller, the universal genius, was an accomplished musician, and delighted in taking his part on the violoncello. Orfila, in place of becoming the founder of modern toxicology, had well nigh turned his magnificent baritone voice to profit on the stage. M. Bataille, one of the most admired of the singers at the *Opéra Comique*, is a doctor of medicine; and a young *agréé* of great promise, and possessed of a beautiful tenor voice, has deserted the Academies of Science for that of Music. Quite lately too a M. Hans, a young man 21 years of age, has made a promising *début* in Lablache's character in *Norma*, at the *Théâtre Italien*, and is engaged for next season in London. He is the son of the celebrated Rokitsansky, of Vienna.—*Union Méd.*

LIBERTY OF THE MEDICAL PRESS IN FRANCE.—After the celebrated *coup d'état*, which established the position of the present ruler of France, not a word was allowed to transpire in the French Medical Journals respecting the fate or treatment of the wounded. Not a case was related, not a clinical observation made; and as far as could be learned from these journals, such an event, even as regarded its scientific teachings were concerned, had never occurred; although respecting former outbreaks no such silence had ever been observed. Matters do not seem to be much better now, the Medical Journals being subjected to the same interdict as the political ones, for instance, of not discussing the mental state of Verger the assassin of the Archbishop. The Editor of the *Moniteur des Hôpitaux*, after having in a previous number stated his intention of discussing at full the reasons which, in his mind, proved Verger to be insane, has been obliged in a subsequent one to announce that he is under the necessity of abandoning this project.

A WITTY VETERINARIAN.—The late vicar of Sheffield, the Rev. Dr. Sutton, once said to the late Mr. Peech, a Veterinary Surgeon—"Mr. Peech, how is it you have not called upon me for your account?" "Oh," said Mr. Peech, "I never ask a gentleman for money." "Indeed," said the vicar, "then how do you get on if he don't pay?" "Why," replied Mr. Peech, "after a certain time I conclude that he is not a gentleman, and then I ask him!"

MEDICAL PROFESSION IN FRANCE IN 1856.—According to the *Annuaire Médical and Pharmaceutique*, just published, there are distributed over 7662 communes in France 11,253 Doctors of Medicine, 6765 *Officiers de Santé*, and 5550 *Pharmaciens*. Compared with 1855, there is a slight increase in the number of Doctors and *Pharmaciens*, and a sensible diminution in that of *Officiers de Santé*.

ESSEX AND COLCHESTER HOSPITAL.—On Thursday, the annual general meeting of the governors of this institution was held. The report showed the receipts, including the balance in hand, to amount to £2021 19s.; expenditure, including the purchase of £300 stock, to £1981 7s., leaving a balance in hand of £40 11s. 3d. The number of in-patients had been 261; out-patients, 264.

LIVERPOOL EYE AND EAR INFIRMARY.—The annual meeting of the friends and subscribers to the Liverpool Eye and Ear Infirmary took place Jan. 26. From the treasurer's account it appeared that the total income of the institution during the past year was £1128, the income exceeding the expenditure by £130 17s. 11d. There had been 4271 out-door patients suffering from diseases of the eye, and 1391 from those of the ear.

THE CITY ORTHOPÆDIC HOSPITAL, HATTON-GARDEN.—The annual general meeting of the supporters of this charity was held on Friday afternoon at the hospital. The annual report stated that the committee had great satisfaction in referring to the continued progress the institution had made in public opinion since its establishment in 1851. The high estimation in which the institution was held was demonstrated by the increased number of patients admitted during the past year—viz., 927, which exceeded by 101 that of the preceding year, and also by the increased amount of patronage and support it had received during the same period, the consequence being a great reduction in the liabilities compelled to be incurred by the committee. The committee acknowledged the receipt of £51 from the Royal Princes of Oude, as a testimony of their appreciation of the institution, and also of a munificent grant of £105 from the corporation of the City of London. In conclusion, the report referred to the valuable

services of the honorary Medical and other officers in terms of deep gratitude. The financial statement showed the receipts for the past year, including a previous balance, to have been £844 11s. 10d., and after all expenses had been met, there remained a balance of £50 8s. 8d. in favour of the charity. Mr. E. J. Chance, the honorary surgeon, then read the Medical report, which stated that, during the past year, 927 patients had been admitted, being an excess of 101 over the preceding year; making a total number of 4,841 persons who have received the benefit of the institution, a large number of whom had been cured of their deformities.

ROYAL MEDICAL BENEVOLENT COLLEGE.—The late Sir Hugh Richard Hoare, who was during his lifetime a liberal friend to the College, has bequeathed £500 to it by his will.

ADULTERATION OF FOOD.—Mr. Postgate has received a letter from W. Scholefield, Esq., M.P., informing him that he is preparing a Bill on the Adulteration of Food, which he hopes to introduce at the commencement of the present session.

POOR-LAW MEDICAL OFFICERS.—At a meeting of the Medical Students of King's College, which was held in the Operating Theatre of the Hospital, J. W. Hulke, Esq., in the Chair, the following resolutions were unanimously agreed to:—1st. Proposed by Mr. Way, seconded by Mr. Wood; That the meeting regards the existing regulations affecting Union Medical Practice as imperatively demanding readjustment, sympathises with the movement set on foot by R. Griffin, Esq., and concurs in the principles adopted by the Poor-law Medical Reform Association.—2nd. Proposed by Mr. Meadows, seconded by Mr. Walters; That among the regulations especially requiring revision are those affecting the present rates of remuneration afforded to Medical officers, and that the system which leaves the fixing of these rates under the control of District Boards of Guardians, and the entire management of the appointments in the hands of non-professional authorities, is radically defective, and detrimental alike to the welfare of the Medical Profession and the public at large.—3rd. Proposed by Mr. Griffin, seconded by Mr. Mason; That this meeting views with deep regret and unfeigned displeasure the unprofessional conduct of those who, forgetful of the broad interests of their profession, have unmanfully accepted offices thrown up by others on principle, thus selfishly helping to perpetuate the existing grievances, and clog the exertions of those who seek their redress.—4th. Proposed by Mr. Swain, seconded by Mr. Day; That this meeting is of opinion that a general conference of the students of the Medical Schools in the kingdom be held; and that this take place in London, at the earliest practicable period.—5th. Proposed by Mr. Hartley, seconded by Mr. Liddon; That a shilling subscription be opened for the purpose of assisting in carrying out these resolutions.—6th. Proposed by Mr. Anstie, seconded by Mr. Watson; That a Committee be formed of the following gentlemen:—Messrs. Lawrence, Way, Meadows, Wood, Swain, and Griffin, with power to add to their number, who shall co-operate on behalf of the students of King's College, with those of other schools, and with the Poor-law Medical Reform Association.

ASTOUNDING CRITICISM.—In the press, and shortly will be published, price 21s.; thirteenth Edition. The Eye, and the most efficacious Means of Preserving the Sight, by Dr. Burnett, M.D.—*Opinions of the Press.*—"Dr. Burnett has accomplished, for the Pathology of the Eye, what Hunter did for the blood, and Jenner for the human race; and we are, as yet, scarcely in a condition to appreciate the extent of our obligations to him."—*Tail's Magazine.* "No department of surgery has, in this country, attracted a greater degree of attention of late years, than that which relates to diseases of the Eye, and certainly no class of diseases has, within that period, received a greater accession of improvement. Various causes have co-operated in producing this valuable addition to our stock of professional information. The knowledge of the fact that ophthalmic surgery had been cultivated with greater assiduity and success on the continent than in England, awakened emulation, created inquiry, and greatly conduced to draw the attention of the profession in this country to the nature and treatment of diseases of the Eye. But it is to Dr. Burnett that we must assign the credit of having placed ophthalmic surgery on its present scientific basis. Having been educated for a general practitioner, and having subsequently distinguished himself as one of the best practical anatomists

of the day, he was induced, with the concurrence of the surgeons and physicians of Guy's and St. Thomas's Hospitals, to abandon, generally, surgery, and exclusively to confine his attention to diseases of the Eye. The high expectations raised by Dr. Burnett's attaching himself to the study and practice of ophthalmic diseases have not been disappointed; the limitation of his practice to diseases of the Eye alone, enabled him to concentrate the whole force of his great mind to the investigation of those maladies from which so large a portion of the community suffer, and to effect those astounding improvements in ophthalmic surgery which will transmit his fame to the latest posterity. Many of the diseases of the Eye, which were formerly deemed incurable, are now treated with as uniform success as any other important diseases to which the human frame is liable."—*Times*, Oct. 27th. "All the old modes of treating and operating upon the Eye must be entirely laid aside in favour of the more recent discoveries of Dr. Burnett. When those, who, from their professional knowledge and experience, having had opportunities of acquiring correct information, continue, from an obstinate adherence to former opinions, to practise and recommend operations, which too frequently subject the patient to the most severe and dangerous inflammation, often leaving the Eye in a very imperfect state for the general purposes of vision, they evince minds insensible to high feelings and noble motives. Dr. Burnett's candour is equal to his judgment, and we cannot but cordially recommend his work to the attention of the public."—*Lancet*. "Dr. Burnett having successfully established a mode of treating the Eye, which not only embraces the advantages of all the usual methods known, but is exempt from its accidents and causes of failure; humanity points out the propriety of adopting it, in order to save the patient from the anxiety and pain to which he is necessarily subjected, when from age or other causes he suffers from diminution or loss of sight."—*Edinburgh Review*, September 4th. "Dr. Burnett deservedly enjoys the highest reputation for his general knowledge of surgery, and for his acquaintance with diseases of the Eye, to which he has paid great attention both in his practice and writings."—*Quarterly Review*. "Dr. Burnett has had the greatest share in advancing our knowledge of ophthalmic disease. He repaired to London at a very early age, in order to indulge a strong inclination which he had felt from his earliest years for the study of anatomy and surgery. His attention was instantly directed to diseases of the eye, from seeing many persons in a state of hopeless blindness. His proficiency in this department was soon well known, and hence he was appointed lecturer on ophthalmic surgery."—From *Sketches of Men of mark in the Old World*.—*New York Medical Review*. "It is really refreshing, after the mass of medical folly which is sent to us for the purpose of review, to sit down to a work which deserves our commendation. Such we deem the present work before us."—*New York Herald*. "Dr. Burnett's work upon the Sight is entitled to that respectful applause we so freely and cheerfully accord to all his learned labours."—*Record*. "Dr. Burnett's Treatise on the Sight is by far the best book of the kind which has yet appeared."—*Churchman's Magazine*. "I cannot forget that he has made me, in common with every member of the medical profession, greatly his debtor, by his works on the pathology and treatment of the human eye."—*Dr. Arnott*.

CONSUMPTION OF TOBACCO IN PARIS.—The product of the sale of this substance in Paris, which in 1839 was but 9,647,783 francs, amounted in 1854 to the sum of 17,765,256 francs. Within that space of time the quantity of tobacco employed by the Parisians in pipe-smoking has doubled, and that used in cigars quintupled, while snuff-taking has sensibly declined. Taking the probable number of persons above 15 who employ tobacco in Paris at about 420,000, we find that in the year 1854, each would smoke nearly 4lbs. of tobacco, 143 cigars, and 4 cigarettes. Taking tobacco that is used in smoking in any way, and adding to it that employed for chewing, each individual may be calculated as consuming 5lbs. avoirdupoise annually.

BIRTHS AND INCREASE OF POPULATION IN 1856.—The Births have been during 1856—males, 44,159; and females, 42,674: total, 86,833. Thus it will be seen that the invariable rule holds in such a large population,—the number of males exceeds that of females. The births increase more or less rapidly with the population, and under a reduced rate of mortality the number of deaths in 1856 was less than that of any

previous year since 1852, and the result is an excess greater than was obtained in any former year of births over deaths. This excess is 30,047; and as the Registrar General observes:—"Soldiers and seamen have returned from the seat of war; persons engaged in peaceful pursuits have arrived in the capital from other parts of the United Kingdom and from abroad, and though many have left it for other homes, it may be assumed that sustenance, clothing, and house accommodation must now be found in London for about 60,000 inhabitants more than it contained at the end of 1855."

MORTALITY NOTABILIA.—The deaths registered in the week that ended on Saturday were 1209, which is nearly the same as the number returned in the previous week. In the ten years 1847—56 the average number of deaths in the weeks corresponding with last week was 1167; and if this is raised for the purpose of comparison, proportionally to increase of population, it will become 1284. The rate of mortality that now rules is not high, as compared with that of previous seasons, although it has lately shown that tendency to increase which is to be expected at a period of the year usually the most fatal to human life.

BIRTHS.—The births of 879 boys and 883 girls, 1762 children, were registered; average, 1572.

METEOROLOGY.—The mean height of the barometer in the week was 29.602 in. The highest reading occurred on Thursday, and was 29.77 in. The mean temperature of the week was 31.2°, which is 7° below that of the previous week, and lower by 6.8° than the average of the same week in 43 years.

The following are the number of Deaths from Small-pox, Measles, Scarlatina, Hooping-cough, Diarrhoea, and Typhus in the several Districts of London, for the past Week:—

	Popula- tion.	Small- pox.	Measles.	Scar- latina	Hoop- ing- Cough.	Dia- rrhoea.	Ty- phus.
West.....	376,427	..	2	2	10	3	3
North	490,396	5	1	5	5	..	4
Central ..	393,256	..	2	4	13	2	6
East.....	435,522	..	9	9	16	3	9
South	616,635	3	9	9	13	2	6
Total..	2,362,236	3	23	29	57	10	28

DEATHS REGISTERED in the Metropolis for the Week ending
Saturday, January 31, 1857.

		In the Week ending Saturday, Jan. 31, 1857.						Averages of Temperature and Deaths in 10 Weeks.
		Deaths of Persons.						
CAUSES OF DEATH.	AT ALL AGES.	Under 20 Years of Age.					At 80 Years of Age and Upwards.	
	Mean temp.	Under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.	At 80 Years of Age and Upwards.		
Mean Temperature	31.2						39.0	
ALL CAUSES	1209	557	142	202	233	60	1167.3	
SPECIFIED CAUSES	1191	554	142	202	233	60	1152.0	
DISEASES:—								
1. Zymotic Class	188	155	17	9	7	..	247.3	
2. Dropsy, Cancer, and others of uncertain seat	65	10	8	20	25	2	47.0	
3. Tubercular Class	194	80	59	48	7	..	185.9	
4. Of Brain, Nerves, etc. ..	156	66	12	31	39	8	121.9	
5. Of Heart, etc.	48	7	6	19	16	..	44.3	
6. Of Respiratory Organs ..	288	123	26	49	77	13	256.4	
7. Of Digestive Organs ..	68	34	5	12	13	4	61.6	
8. Of Kidneys, etc.	14	2	4	4	3	1	13.7	
9. Of Uterus; viz.—Puer- peral Disease, etc.	7	..	3	4	..	..	8.4	
10. Of Joints, Bones; viz.— Rheumatism, etc.	4	2	..	2	..	..	8.3	
11. Of Skin, etc.	4	2	..	..	2	..	3.3	
12. Malformations	2	2	..	..	..	..	3.6	
13. Debility from Premature Birth, etc.	21	20	..	1	..	..	28.9	
14. Atrophy	39	28	..	..	30	..	27.4	
15. Age	61	..	..	..	11	31	57.4	
16. Sudden	8	4	..	2	2	..	9.7	
17. Violence, Privation, etc. ..	24	19	2	1	1	1	26.9	
CAUSES NOT SPECIFIED.. ..	18	3	..	..	..	..	15.3	

TO CORRESPONDENTS.

A Husband.—The practice of employing women as midwives appears no doubt at first sight to be most consistent with the delicacy of the female character; but we believe that if the ladies themselves were asked their opinion it would incline to the employment of Practitioners of the opposite sex. The reasons for preferring Medical men as accoucheurs are too obvious to require discussion.

Assistant-Surgeon.—The establishment of the Military Train now organizing will include a Surgeon only; and the Depot, one Surgeon. No Assistant-Surgeons.

PYÆMIA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In the last number of the *Medical Times and Gazette* you drew attention to the occurrence of pyæmia after some operations which are generally exempt from it; and you very properly caution the Profession against stating that any operation is free from danger. Among the cases cited was an operation on the breast last year at St. Bartholomew's Hospital—pyæmia supervened on removal of a large mammary glandular tumour; and to show how simple an injury may originate it, I may mention a case which happened at the same Hospital, of pyæmia following a simple fracture of the tibia, accompanied with very slight ecchymosis. This patient, however, eventually recovered.

I was much interested with Mr. T. Holmes's paper on the mortality from pyæmia in operations, agreeing with him in considering that chloroform does not augment the mortality in those cases in which it is administered; yet I doubt whether it has any tendency to diminish it. I would suggest that his tables are as yet incomplete, as he has only given the mortality. I should wish to know in how many cases pyæmia had occurred after operations, how many of them recovered, how many died, and, also, how many recoveries in cases of pyæmia, not operations.

I fear the return of recoveries will be but small, or even nil, or Mr. Holmes would scarcely have omitted them; yet I believe we ought not to look upon a case of pyæmia as hopeless, as is too often done; for, if seen at its commencement, the attack may often be averted, and a well practised eye will soon detect its approach, though an ordinary observer might not notice any difference in the patient. It is from such men I would seek information as to how many cases, seen at the first onset, have recovered, and what remedies were employed, also what particular cause was suspected of producing the attack, and the date and duration of it.

It would be of immense advantage if, in each Hospital or Infirmary throughout the kingdom, facts were briefly yet properly stated, and regularly noted down, so as to form a useful series of statistics on which to found our rules of practice—for each recorded fact is worth something.

I am, &c.

JOSEPH ALLEN.

Royal Infirmary, Liverpool, February 2, 1857.

Ignoramus.—The medical virtues of camphor are not well known, although that drug is very largely employed in Medical practice. It has commonly been considered as anaphrodisiac, but there seems to be no good grounds for attributing to it such a property. It is frequently prescribed as a mild sedative in fevers and inflammatory affections.

A Scotsman.—Under the circumstances mentioned, he would be admitted to an *ad eundem* diploma of the London College of Surgeons.

An Irishman and Subscriber.—No, to both questions.

Mr. Spurgin's case shall be inserted.

Mr. Parker's handbill and "Physiological Views" have been noticed already quite as fully as they deserve.

A Country Surgeon.—We should rather not publish the letter, but may say that the case appears to be one in which cantharides would be useful. The tincture might be given with the muriated tincture of iron in doses of ten drops of each three times a day.

A letter for A. Z. O. is at our office from a Correspondent.

Mr. Christmas's letter would expose us to an action for libel if published.

A. B. C.—Degrees granted in Germany vary much in value, and some of the German Universities which were formerly in high repute as schools of Medicine have now fallen into comparative insignificance. The degree of Doctor of Medicine of Berlin or of Vienna is a most honourable distinction.

Students.—The period of three years may be passed in attending lectures and hospital practice by the student during his apprenticeship, and the whole time may be so spent without any infringement of the Apothecaries' Act. It is desirable that all pupils should acquire a practical knowledge of the art of dispensing.

Mr. Allen's suggestion shall not be lost sight of.

Dr. Hinde's letter shall appear next week.

Mr. Crosse.—Thanks. The report shall be inserted in an early Number.

Mr. Jones's interesting case of perineal section is at the printer's.

Transalpinus.—1. Mr. Fergusson's manual. 2. Nachet, in Paris. In London, Ross, Powell, Smith and Beck, or Pillischer.

ERRATUM.—In a letter, signed "Medicus," which appeared among our Notices to Correspondents last week, for "*per cure*" read, "*per case*."

A CASE FOR CONSULTATION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—A young healthy man contracted gonorrhoea in 1854; the apparent cure extended over two months. No primary sore. In September, 1855, observed for the first time a gleet discharge. The stream of urine during micturition was much twisted and divided. On 27th November, 1855, he placed himself under my care. The subjoined appearances were then observed:—slight urethral discharge, a quantity of minute superficial ulcers by side of frænum, one on corresponding surface of prepuce. Each ulcer during the subsequent course of the disease never extended to more

than the eighth of an inch. No. 3 bougie was introduced, but with difficulty; on withdrawal a discharge followed.

The seat of the obstruction seemed principally towards the bulb. The size of the bougie was gradually increased until the 21st of January, 1856, when a No. 10 was introduced with ease. Astringent injections were used, and tonics were administered internally. For the sores weak solutions of opium, sulphate of zinc, bichloride of mercury, &c., were applied. The discharge from the urethra disappeared about this time. The ulcers also kept appearing and disappearing prior to this period, when they finally vanished.

In February the throat became of a deep red colour, having a superficial ulcer on right tonsil. He was placed on small doses of hyd. sc. creta, combined with opium, until the gums became tender. During the month he had several moist mercurial vapour baths; the preparations used were the binochloride and binoxide. Iodide of potassium in combination with small doses of binochloride of mercury were exhibited internally until the 28th April, when he had supplied to him some of the mineral acids. In May all indications of disease disappeared.

On the 28th ult. he reapplied, in consequence of a number of small ulcers exactly similar to those already described, and in the same position, but without any other symptom of disease. I scraped the surface of several of the ulcers, and inoculated the thigh in two places. Examined the thigh on the 31st: found one place free from any unusual appearance, but the other presented a slightly inflamed aspect.

The sores are apparently healing under a weak solution of sulphate of zinc.

As I am at a loss what further treatment ought to be resorted to, I shall take it kind if some of your readers will sketch out some plan for my guidance.

I am, &c.

A COUNTRY SURGEON.

LIGATURE OF EXTERNAL ILIAC.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

DEAR SIR,—In our Queenstown Hospital Mr. Cronin successfully tied the "external iliac" on January 28, 1857, in presence of veterans and tyros of city and county. Mr. Cronin was educated at George's Hospital, and particularly attracted the attention of Sir Benjamin Brodie during his medical novitiate.

The above is not the only critical operation performed by Mr. Cronin in this town for the last twenty years and upwards, and of which his own modesty has left no other record but that of the grateful sufferers who have been relieved, and that of the local Medical men, who have always been glad to witness his skill and derive benefit from his practice.

I am, &c.

AMICUS.

Queenstown, February 2, 1857.

COMMUNICATIONS have been received from—

DR. MOUAT; MR. PROPERT; MR. WHARTON JONES; MR. T. R. JONES; DR. MORRIS; DR. BAINES; MR. WYATT; MR. REED; MR. BAKER BROWN; DR. CHILD; MR. GRIFFIN; MR. HARRISON; DR. LEES; MR. PARKER; DR. SHEARMAN; MR. GRIFFIN; DR. MARCET; MR. HOLTHOUSE; MR. CORFE; MR. CHRISTMAS; MR. BROOKES; MR. M'DERMOTT; MR. HAYDEN; DR. G. HEWITT; DR. MACKECHNE; DR. COPPINGER; MR. A. G. PROCTOR; MR. HADDEN; DR. ANDERSON; DR. WOLFE; MR. GREEN; DR. CAMPBELL; MR. DUNNE; MR. PLAXTON; MR. PIKE; MR. LASSETTER; MR. SUTHERLAND; MR. J. H. JACKSON; MR. BOXALL; DR. E. SIMPSON; MR. G. WARING; MR. J. M'GILLAVRAY; DR. LEES; MR. R. SENIOR; MR. R. HALL; DR. EMMERTON; MR. CROSSE; MR. JONES, Jersey; MR. ALLEN; MR. WAY, King's College; MR. JOHN WOOD; MR. BIRKETT; MR. COOPER FORSTER; MR. DEBENHAM; MR. JENKINS; MR. PART; DR. HEWITT.

APPOINTMENTS FOR THE WEEK.

7. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; Westminster, 1 p.m.; King's, 2 p.m.; Charing Cross, 1 p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m.: Mr. Ross, "On the Secondary Eruption following Vaccination."

ARMY MEDICAL AND SURGICAL SOCIETY, 7½ p.m.: Surgeon Jephson, King's Dragoon Guards, "On Injuries of the Head."

ROYAL INSTITUTION, 3 p.m., Professor Phillips, "On Successive Lands and Seas."

ROYAL BOTANIC SOCIETY, 3¼ p.m.

9. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.; Orthopædic Hospital, 3 p.m.

10. Tuesday.

Operations at Guy's, 1 p.m.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Ballot at 7½ p.m.

Mr. Henry Thompson, "On the Anatomy and Pathology of the Adult Prostate;" Mr. Solly's "Case of Double Talipes Varus, in which the Cuboid Bone was partially removed from the left foot."

ZOOLOGICAL SOCIETY, 9 p.m.

ROYAL INSTITUTION, 3 p.m., Prof. Huxley "On the Sense of Hearing."

11. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m. Orthopædic Hospital, 3 p.m.

HUNTERIAN SOCIETY. Annual Meeting and Election of Officers, 7 p.m. Oration, 8 p.m.

NORTH LONDON MEDICAL SOCIETY, 8 p.m. Election of Officers and Oration. MICROSCOPICAL SOCIETY, 8 p.m. Anniversary.

ETHNOLOGICAL SOCIETY, 8½ p.m.

12. Thursday.

Operations at St. George's, 1 p.m.; Middlesex, 1½ p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.

ROYAL SOCIETY, 8½ p.m.

ROYAL INSTITUTION, 3 p.m. Professor Tyndall "On Sound."

13. Friday.

Operations at the Moorfields Ophthalmic, 10 a.m.; Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8½ p.m.

ORIGINAL LECTURES.

CLINICAL COMMENTARY

ON

A CASE OF TRICUSPID REGURGITATION,

DELIVERED AT

University College Hospital.

By W. H. WALSHE, M.D.

Professor of Medicine and of Clinical Medicine in University College,
Consulting Physician to the Consumption Hospital, Brompton, etc.

A female, aged thirty-six, exposed to wet and damp, after successive attacks of rheumatic fever, begins to suffer from serious symptoms, cardiac and pulmonary. A year later, admitted into hospital, presents the signs of tricuspid regurgitation, &c., with dropsy, and dies seventeen days after admission. Peculiar points in diagnosis of tricuspid regurgitation; danger of trusting to laws of repulsion of diseases as elements of diagnosis; deceptive appearances of closed pulmonary excavation; hæmorrhage into sheath of rectus abdominis in heart-disease; congestive albuminuria; persistent sickness, &c.

MARY HISHIN, admitted into University College Hospital, October 20, 1855; ætatis thirty-six (looks considerably older); stout; textures flabby; large mammary development. Her father died, ætatis thirty-eight, of rheumatism; her mother still lives. The patient has had three children, the first eighteen years ago, the last eight years ago,—all three dead, one still-born, one from phthisis. She has lived all her life (but one month) in London; occupies a second-floor, airy, without bad smells; has had sufficiency of food, clothing, and firing; a washerwoman by occupation, stands twelve of the twenty-four hours on an average "over the tub;" drinks, on an average, three pints of beer daily, and of gin, undiluted, from a quarter to half a pint; uses no tobacco.

Eighteen years ago had rheumatic fever; two months in bed; all limbs affected. Fourteen, six and one years ago had successive attacks of the same complaint,—with the last, cough, palpitation of heart, and greater swelling of joints than ever. Six months ago "vomited" half a pint of very dark blood, and continued to "spit" blood for three days, about "one pint each twenty-four hours," when it was stopped by medicine.

Present state.—October 23.—(a) Lying on left side; face and neck livid, intensely so during fits of coughing; (b) skin cool; legs livid; great anasarca up to thighs; (c) joints unaffected; (d) lips swollen, livid; tongue large, livid, flabby, pitted, foul; appetite null; bowels confined; (e) respiration = 36; nares distended in ordinary breathing; loose rhonchus audible at distance; cough frequent, loose; eyes seeming to start from head; watery conjunctivæ, their small vessels distended almost to bursting; expectoration viscid, medium frothy, muco-gelatinous looking, free from blood; supra-sternal hollow sinks deeply on inspiration. Back of chest: superiorly percussion natural, here and there central and lower right back resonance slightly deficient; at left base finish moist rhonchus, large-sized at right; no true crepitant rhonchus anywhere; (f) pulse = 124, somewhat resistant, irregular in force, not distinctly so in rhythm; heart's impulse shakes left side from second rib to epigastrium, relatively most at epigastrium, where sufficient to shake head, though less so than at left ventricular region; arterial throbbing in neck; base of neck tumid; right external jugular slightly, left greatly swollen and tortuous; neither of the two fills from below, nor pulsates except through influence of artery adjacent; apex-beat not distinguishable to eye, to finger appears at six and a quarter inches below clavicle, at least this the lowest point of impulse; no distinct bulging of præcordial region; no thrill above or below clavicles; percussion of medium force (rendered difficult by fulness of mamma) gives an area of dullness, reaching largely to the right of the sternum, equal eight inches transversely, and six inches vertically in the line of the left cartilages; the transverse measurement and the height at which the dullness is seated in the chest are the most striking points; at the base both sounds are audible, the first with attendant soft murmur, the second of so-called *phewitt* character; at the ensiform cartilage the first is attended with prolonged soft murmur of medium pitch, the second is

sometimes covered by this, sometimes audible solely; at the mitral or left apex both sounds are audible, with the first slight murmur is caught, apparently transmitted from site of ensiform cartilage; there is no marked systolic murmur at mid-height of the left ventricle; (h) urine 24 ounces, slightly acid; (i) catamenia absent last twice; (k) intellect unaffected. *Hæmat* cras primo mane haustûs nigri, ʒjss. R Tinct. lobel. æthereæ, mxx.; oxymel. scillæ, ʒss.; potassæ nitratis, gr. x; decoct. scoparii compos. ad ʒjss., pro haustu sextis horis sumendo. Middle diet; one pint strong beef tea with quarter ounce prepared gelatine.

25th.—Pulse 128, regular, feebler; respiration 40; sickness constant; dilute hydrocyanic acid, even, rejected; abdomen distended, fluctuates obscurely; epigastric tenderness; though systolic murmur is still of maximum force at ensiform cartilage, it is certainly more audible than it was towards the left apex region, at the outer part of this region it is, however, very feeble; sputa moderately abundant, greenish, mucofrothy. Emplastrum lyttæ (4 inches by 4) epigastrio.

27th.—In the sitting posture, the systolic murmur is almost inaudible at the ensiform cartilage, whereas, relatively, it is much more marked than at left apex; three inches at right posterior base dull under percussion, nearly two at left; at right base respiration very feeble, covered by dry and coarsish moist rhonchus, finer moist rhonchus at left; bowels open.

30.—Pulse 132; respiration 36; anasarca greatly increased; two watery motions; no urine saved, very little passed with motions; percussion-note at hypogastrium clear; murmur towards left apex as loud as at last visit, less loud towards ensiform cartilage; sickness continues, all food rejected; cough very troublesome, drier; insomnia; posterior bases of chest *in statu quo*. Emplastrum lyttæ epigastrio; morph. hydrochloratis, gr. j.; pulv. sacch. alb., gr. ij., pro pulvere more endermico utendo. R Oxymel. scillæ, ʒj.; tinct. lyttæ, mij.; sp. ether. nitrici, ʒss.; acidi hydrocyanici diluti mij.; aquæ ad ʒj., pro haustu sextis horis sumendo.

November 1.—Has kept down some food; the medicine stays down well; lividity of surface increased; murmur more audible at left than towards right apex; no murmur at base; area of dullness at right posterior base of chest increased, very little respiration there; moist rhonchus increased at both bases; pulse 116, regular; respiration 32; cough very troublesome; expectoration muco-purulent, in very small quantity. To have brandy, ʒj.

3rd.—Distress still increased; pulse 140, perfectly regular in rhythm; respiration 36; systolic murmur now very faint at both points above referred to, strongest directly below nipple; no murmur at base, where the first sound is short, and of a twanging character; pupils large, equal. R Etheris chlorici, mxxv.; sp. ammon. aromat. mxxv.; syr. simpl. ʒss.; aquæ ad ʒj., pro haustu 4tis horis. To have a teaspoonful of brandy midway between the draughts.

4th.—Midnight breathing stertorous; patient insensible; murmur audible, but very faint at both the points above-mentioned, and in the proportionate strength of last visit; sank at 1.20 a.m.

Sectio Cadaveris, thirty-six hours after death.—Weather moist, warm for season; slight rigidity in four limbs; slight vinous staining posteriorly; abdomen contains a large quantity of serous fluid; in sheath of right rectus abdominis effused clotted, recent blood, separating fasciculi and softening fibres, the muscle beyond the hæmorrhage perfectly sound in aspect. *Position of Organs.*—Liver half-an-inch below rib-margin; heart lies much to left; right lung's anterior edge reaches beyond middle line a little, on the level of second cartilages, where the edge of left lung, lying backwards, is separated two and a half inches from it; at the fifth rib, the anterior edge of the left lung lies entirely behind the heart. *Pericardial Sac* contains about four ounces of reddish serosity; no lymph. *Heart.*—Outline squarish, apex rounded off; transverse measurement of ventricles 6 inches, vertical 4½, antero-posterior (principally given by septum) 2½; right cavities filled out with grumous coagula; right auricle more or less closely covered, on pericardial surface, with stratified induration-matter, finely mammillated and slightly puckered, nowhere rough; cavity greatly dilated; pectinati muscles largely hypertrophous; spots of hæmorrhagic effusion under endocardium, which membrane is much too opaque for this side of heart. Tricuspid orifice admits thumb and four fingers of medium-sized hand up to first joint. Of the three divisions of the valve two only can be said to have practical existence;

these two divisions are, especially in relation to their connected and much dilated cavities, very shallow; the deeper of the two is irregularly opalescent, puckered in the centre, its free edge somewhat thickened, but perfectly smooth; the tendinous cords are so much shortened, that in some spots the edge of the valve seems directly inserted into the columnæ carneæ. Minute, well-defined, warty vegetations, on auricular surface of this division near free edge. The smaller division of the valve is also thickened and opaque, and its cords thin, delicate, and short; these two divisions of the valve are drawn towards each other at their juxtaposed edges, and remarkably puckered; these conditions of the valve must have permitted free regurgitation during life.

Right ventricle.—Columnæ carneæ highly hypertrophous; wall (excluding columnæ) three-eighths of an inch thick, except towards apex, where much fat beneath pericardium; septum encroaches with convex outline on cavity of ventricle; infundibulum of ventricle greatly dilated, and wall good quarter of an inch thick; endocardium nothing notable. Pulmonary artery remarkably wide at orifice; valves have not enlarged *pari passu*, but are small; behind them, especially one, are pouchy dilatations of the vessel-wall. *Left auricle.*

—Extra-capacious, almost in proportion to the right; thickness of endocardium below average for this age. *Mitral orifice* admits three fingers of same hand nearly up to second joint; valve thickened; cords shortened and thickened, a good deal of fine vegetation at free edge. *Left ventricle.*

Papillary muscles much enlarged; thickness of wall, three-eighths to five-eighths of an inch; cavity dilated, globular in form. *Aorta.*—Valves, looked at from above, appeared sound.

Septum ventriculorum thickened. *Right Lung.*—Old pleuritic adhesions, with a bleb-like mass of pseudo-cellular tissue posteriorly infiltrated with serosity; anterior edge of lung thick from emphysema; lower lobe spongy, moderately congested, yields with difficulty under thumb; marked puckering of apex from thickening of pleura, with sinking inwards of supra-pleural old emendation-matter; immediately under the puckering (on all sides, however, surrounded by pulmonary substance which is very dark in tint) is a mass, size of large pea, of putty-like tubercular matter; no crude tubular or grey granulation; bronchi highly congested, thickened, and dilated. Weighs 24½ ounces. *Left Lung.*—Pleural sac contains large amount of serosity; old adhesions, no recent lymph. Lower lobe inferiorly flattened, flaccid, airless, sinks instantly in water; pleura puckered at apex, as on other side, without subjacent tubercle; but a portion of dilated bronchus with thickened wall lies underneath; some very small semi-transparent grey granulations set in dark ground; bronchi as on opposite side; a few lobules, upper lobe, emphysematous. Weighs 18 ounces. *Liver.*—Weighs 60½ ounces; 10½ inches broad, 8 inches thick; cirrhotic; of so-called "nutmeg" aspect; hepatic veins, as also cava inferior, of strikingly large calibre; gall-bladder, projecting half an inch below liver-edge, moderately full of dark olive orange bile; no gall-stones. *Right Kidney.*—Weighs 6 ounces; congested; structure less defined than natural. *Left Kidney.*—Appearances as on other side; no cyst in either organ. *Spleen.*—Weighs 8½ ounces; rather soft. *Brain.*—Cerebrum much congested; no fluid in ventricles; dura-matral arachnoid unusually dry; no atheroma in basilar or other large arteries; cerebellum and pons natural. *Uterus.*—Mucous membrane round as much congested, presents about a dozen small ecchymoses; saccular dilatation of left Fallopian tube.

COMMENTARY.

§ I. The diagnosis, inscribed on the bed-ticket of Hishin, ran thus: "*Primary disease; dilated hypertrophy of both sides of the heart; tricuspid regurgitation? Secondary diseases: bronchitis, commencing cirrhosis of the liver; anasarca; ascites; congestive albuminuria.*" Now, in commenting on the narrative of her case, our most profitable course, gentlemen, will apparently be, to set forth the elements on which this diagnosis was founded, refer at each step to the post-mortem details, ascertain to what extent those details bear out the anticipations conceived during life, and hence draw inferences (in such measure as a single instance can justify the proceeding) applicable to future analogous cases.

§ II. Of the existence of enlargement of the heart no doubt could for a moment be entertained; what was its nature? In all probability this enlargement was produced by hypertrophy and dilatation, with excess of the latter over the

former; and for these reasons:—the transverse measurement of cardiac dulness under percussion of medium force exceeded the vertical; the apex-beat was obviously deficient in distinctness (a condition suggesting at once the broadly-rounded-off apex-region of dilated hearts); the absence of all thrusting character in the impulse; the deficiency of præcordial bulging, which, had an enlargement so great as that betokened by the extensive area of dulness in Hishin depended on pure hypertrophy, must have long since been engendered; and, lastly, the fulness of the first sound. These points, in association especially, deposed against pure hypertrophy; whereas both singly and collectively they gave evidence of hypertrophy of walls with excess of dilatation. Next, while the extension of the percussion-dulness to the right of the sternum and the epigastrium, together with the swollen state of the jugular veins, proved that the enlargement affected the right side of the heart, the extension to the left and forcible impulse in that quarter showed that the left compartments were seriously implicated also. As the dulness reached so high as the second cartilage, an elevation rather unusual in cases of mere dilated hypertrophy of the moderate amount existing in Hishin, it became necessary to inquire whether the area of dulness might not be increased in the upward direction by some additional morbid, or at least abnormal, state: but we saw every reason, as you will remember, to reject the existence of pericardial fluid, dilatation of the arch of the aorta, and mediastinal fat as possible causes of the elevated upward-reach of the dulness, holding it to depend (the explanation was sufficiently vague, and under the circumstances difficult alike to prove and to disprove) on the position of the heart being congenitally high. And here precisely was the single point of those so far considered in which the post-mortem examination corrected the diagnosis: for, when the chest was opened, it appeared obvious the unusual dulness upwards really depended on the dilated hypertrophy of the auricles, especially of the right,—where, too, a coating of stratified pericardial induration-matter lent its aid—small but real—in elevating the area of deficient resonance.

And the orifices; how stood these? During the earlier period of the patient's stay with us, the evidence appeared clear and decisive as to the existence of a disturbed condition at the tricuspid orifice. A murmur, soft in quality, low in pitch, co-existent with, but not covering, the first sound, of maximum force at the ensiform cartilage, and inaudible towards the left apex, could not be looked on as the exponent of mitral disease, especially as the physical signs gave us no reason to believe in the existence of such amount of emphysema of the left lung as might seriously interfere with the conduction to the surface of a murmur generated directly beneath. Assuming, then, that the murmur originated in connexion with the tricuspid orifice, what was its mechanism? Did it arise from sharp collision of blood, at the moment of the systole, with thickened and roughened cordæ tendinæ, or was it the effect of systolic regurgitation into the auricle? Now, it is true, where notable regurgitation exists, the jugular veins, as a rule, pulsate; the absence of such pulsation, however, does not (we have more than once seen the post-mortem demonstration of this) disprove the fact of regurgitation. Besides various of the sequential phenomena of venous systemic stagnation, such as appertain to regurgitation, manifestly existed in Hishin. And, further, though we admit, theoretically, the production of systolic murmur at the right apex through blood-collision with thickened and roughened cords, or blood-friction against obstructive inequalities on the surface of the infundibulum of the ventricle, I have neither myself met with an unquestionable example, nor read a convincing narrative of a case of such mechanism. Yet another point: in well-marked cases of tricuspid regurgitation the second heart-sound is commonly more or less enfeebled at the right apex, because, a proportionally deficient current of blood being sent on by the systole to the pulmonary artery, the ensuing flap of its valves is less energetic and sonorous. Now in Hishin the second sound was not deficient in tone or fulness over the right ventricle. How was this circumstance to be reconciled with the regurgitant view? By reference to the possible existence of mitral regurgitation, which (as Skoda was the original teacher) leads to reinforcement of the second sound in the pulmonary artery, and so would have counterbalanced the enfeebling influence of the tricuspid regurgitation? No: for we had, in the first place, at this stage of our acquaintance with Hishin, no evidence of mitral regurgitation;

and, in the second place, that form of regurgitation often exists (I have repeatedly shown you this at the bed-side) without any of that attendant excess of force of the pulmonary second sound, for which Skoda ingeniously, but, in my mind, too fancifully, pleads. Besides our record in the Hospital-book goes to prove (as far as it bears witness on the point at all) that the second sound was never intense above par at the left side of the heart. During life, then, we were unable to strike out any explanation of the co-existence of the presumed well-developed tricuspid regurgitation, with the full-toned second sound at the right apex. But, after death, the mystery was cleared up; at least it seems to me extremely probable that the somewhat dilated condition of the pulmonary artery, immediately above the sigmoid valves, rendered the recoil of the blood and flap of the valves more than usually sonorous. Lastly, the pulse was irregular in force. Did this irregularity interfere with the diagnosis of tricuspid, or call for that of mitral, regurgitation? Neither one nor the other; the existing dilatation amply sufficed to explain it, without reference to the orifices at all. As to the aortic valves, there was no sufficient reason for adjudging them to be unhealthy. The peculiar combinations of sound and murmur, which I have endeavoured to represent by the syllable *phwitt*, existed in too imperfectly-developed a form to justify us in supposing regurgitation took place at the orifice of the artery, or that that portion of its walls immediately above its valves had become seriously roughened by calcification, or otherwise.

The case seemed, then, *quoad* the orifices, very palpably one of tricuspid regurgitation, rendered remarkable simply by the amount of attendant murmur; for, as you well know, recoil of the blood of the ventricle to the auricle does very frequently take place without the generation of the slightest murmur; but by-and-by arose a singular difficulty,—the site of maximum intensity of the murmur changed. This lost force in the right apex region, acquired it towards the left apex. Insomuch that had Hishin been now examined for the first time, the probabilities are we should have regarded her case as one of common mitral regurgitation, rendered simply somewhat peculiar by the amount of murmur audible (by transmission from the left side) at the right side of the heart. And it was in consequence of this variation in the localization of the murmur, taken in conjunction with the established infrequency of tricuspid regurgitant murmur, we were induced to modify our diagnosis so far as to place a note of interrogation after the words “tricuspid regurgitation.” What, then, did the post-mortem inspection say? Why, that the tricuspid valve was to a serious extent insufficient as a matter of certainty; whereas the evidence of the same defect in the mitral was slight, and in point of fact not positive. Unfortunately, our usual experiment on the valve, to test its mechanical fitness, was not performed. But with such evidence before us, with especially such striking structural alterations in the tricuspid valve, we could not doubt that the systolic murmur had been essentially generated at the connected orifice. How, then, was the change in intensity of the murmur effected? I confess myself unable to explain this point satisfactorily, and it is useless to indulge in hypotheses, not one of which I could succeed in proving, nor you probably in refuting. If the murmur heard with the advance of the case towards the left apex really originated at the mitral orifice, the lateness of its discovery may have depended either on the fact of its really not having previously existed,—or previously inaudible, though existing it may have at length reached our ears, because, in consequence of the increase of the left pleural effusion, the lung on that side receded, and the heart advanced in closer and more extended contiguity to the wall of the chest. Remember, at the time of death the pleural fluid had increased to such an amount that, on the level of the fifth rib, and below this, the anterior edge of the left lung lay entirely behind the heart. Besides, it must not be forgotten that the right lung encroached very positively on the left division of the thorax. We may then, gentlemen, admit it to be proved by this case, that increasing feebleness of a murmur at the right apex region, even though at the same time a murmur of increasing intensity become audible at the left apex, furnishes no valid reason for declining to refer the former to the tricuspid orifice. The opacity, toughness, and thickness of the endocardium of the right auricle, equalling, indeed exceeding, that commonly observed even in advanced age in that of the left, cannot be passed

over without notice. The amount of the changes showed their cause must long have been at work,—that cause, beyond question, can have been none other than the tricuspid regurgitation. As to their immediate mechanism, I should be disposed to refer them rather to a process of hypertrophy than of actual inflammation. Note, too, the existence of atheroma in the pulmonary artery, while the narrative makes no mention of similar deposit in the aorta.

§ III. The symptoms of pulmonary origin, as well as the physical signs, pointed to bronchitis and parenchymatous congestion without actual pneumonia. The patient had, according to her account, “vomited” blood copiously some six months before admission. On the insignificance of the word “vomiting,” as indicating that the blood really came from the stomach, it is needless to dwell; it proved easy enough to satisfy ourselves the blood had been ejected from the lungs. But from actual disease of the lung-substance, or from congestion induced by affection of the heart? The quantity evacuated accorded well with the notion of tuberculous hæmoptysis; and the colour described by the patient, though unusual, is not incompatible with tuberculous origin. But during the patient’s life, you will remember, I used, as an argument against that origin, the tolerably well-established law, that active tuberculization and active cardiac disease very rarely co-exist; and, as there appeared to be enough of mischief about the heart fairly to account for the discharge of blood, I referred it to this. Now, whatever be the general correctness of the law just mentioned, an exception existed here, at least, at the time of the patient’s closing struggle; during the very few last weeks of her existence, despite the venous dyscrasia generated by her heart-disease, deposition of grey granulations had been going on in the left lung. But, on the other hand, those granulations were obviously not six months old; such evidences of tubercle, aged six months, as existed, presented all the marks of quiescence or retrograde action. Hence then, curiously enough, though the law was broken finally by the course of events in Hishin’s lung, it had not been infringed at the time to which our application of it referred; by chance, by mere chance, we were right: but let us not forget the warning pronounced by the whole of the circumstances against too confidently utilizing the laws of mutual repulsion or attraction of diseases as elements of diagnosis.

Was the globular dilatation of the left ventricle, with its attendant light mitral regurgitation, or the dilated hypertrophy of the right ventricle, the immediate cause of the hæmoptysis? In all probability the latter. For, in the first place, such direct power on the part of hypertrophy of the right ventricle, unless this be carried to extremes, may be contested; and, in the second, the coexisting tricuspid regurgitation would, in the particular instance before us, have contributed materially to save the lungs from the impulsive influence of the not overgrown hypertrophy actually present.

I have spoken of the alleged large quantity of the blood discharged as an argument against the hæmoptysis having been induced by cardiac disease; and, as a general rule, this is an argument which holds good. Occasionally, however, a discharge of blood, which may fairly be called profuse, occurs in heart disease, either through intermediate pulmonary apoplexy, or simple mechanical congestion.

Spots of surface were found from place to place in the back, marked by slight percussion-dulness. Was this disseminated dulness dependent on congestion, œdema, lobular collapse, pneumonia, or pulmonary apoplexy? Of pulmonary apoplexy there was no evidence; that is, we had none of the peculiar dark-coloured blood expectoration, which in ultimate analysis furnishes, as far as I know, the only trustworthy sign of the nodular form of that morbid state. Certainly there was no pneumonia; lobular collapse was at least unlikely, and not pointed to by any direct evidence. To œdema and congestion we consequently ascribed the deficiency of resonance, and the post-mortem examination supported us by exhibiting those states, and, further, by showing, by the absence of blood-infiltration, either recent or in course of absorption, that pulmonary apoplexy neither existed at the time of death, nor, certainly, at any period reasonably anterior to that event.

§ IV. Let me briefly draw your attention, gentlemen, to a few points in the morbid anatomy of the case. At the apex of one lung existed pleural thickening with puckering: that is, old exudation-matter, thrown out on the pleural surface, had contracted from the periphery of the patch it formed, to-

wards the centre; and, in proportion to the amount of that contraction, had sunk inwards within the plane of the surrounding pleural surface. Beneath this exudation-matter, but separated therefrom by a certain thickness of lung-substance, lay some putty-like tubercular deposit. Had Hishin's life been somewhat prolonged, the contractile process would have drawn the pleural exudation-matter to a greater apparent depth within the lung, brought it into close proximity to the altered tubercular deposit, which would meanwhile, partly from calcification, partly from absorption, have in great measure disappeared; and (as frequently happens) that fibroid-looking exudation-matter, seemingly inside, really outside the lung, would in all probability have been pointed to as the actual material of the cicatrix of a pulmonary excavation.

The limitation of the anatomical conditions of old pericarditis to the right auricle was more striking than explicable. Was it, with the attendant local chronic endocarditis and hypertrophy of the muscular substance, induced by the long-continued and free tricuspid regurgitation? More probable this view, than that which would make the regurgitation sequential to the auricular disease.

Hishin's case furnishes the third or fourth example I have met with, of hæmorrhagic effusion into the sheath of the rectus in persons cut off with actively advancing cardiac disease: although the nexus between the two conditions may not be very easily assignable, I cannot help thinking there is more than chance coincidence in the association.

The liver was cirrhotic just to the extent we had anticipated, that is, the contractile action of the exudation in the portal canals had not yet commenced,—the organ was still large. Hishin's unfortunate addiction to strong drinks, besides the congestive state maintained in the liver by the tricuspid regurgitation, explains the occurrence of cirrhosis.

§ V. Although the fact is omitted in our narrative, the urine was albuminous, but albuminous only to such degree (and with such concomitant states of the fluid) as is referrible to mechanical congestion. We never for a moment supposed her to be the subject of the specific blood-disease named after Dr. Bright.

The pertinacious sickness under which the patient suffered is far from unusual in cases of this class. I have frequently known it continue the prominent symptom, at least in regard of the suffering it caused, for many weeks before death. It probably depends on reflex irritation of the vagus and phrenic nerves; it can scarcely be of merely mechanical origin: but its mechanism calls for inquiry.

§ VI. Hishin's malady seems to have arisen under the joint influence of hereditary rheumatic taint, actual rheumatism, extravagant and enduring abuse of alcoholic fluids, and, lastly, that habitual exposure to wet and damp which sustains the morbid state of blood in individuals disposed to rheumatism, at what I may call the *diathetic point*. By this phrase I mean to express that acute rheumatic sufferings, pyrexial and other, being past, such exposure prevents the diathesis from being eradicated, maintains a low state of rheumatic irritation in the system, and, rendering the individual wholly incapable of resisting external exciting causes of acute seizures, keeps him in constant readiness for the gravest local manifestations of the diathesis.

§ VII. The duration of the heart-disease cannot, from the data before us, be calculated. Eighteen years before her death the first rheumatic seizure occurred, the patient being then in her nineteenth year. What precise amount of mischief this and each subsequent attack may have inflicted on the heart we have no means of ascertaining. However, serious symptoms of cardiac and pulmonary character do not appear to have ensued till the fourth attack, a year before her admission. Granting that notable heart-symptoms in reality appeared then for the first time, the year's protraction of life was, under the circumstances, just what Hishin was entitled to expect. At least I believe it to be rare, that in a deeply rheumatic constitution, where heart-disease has taken substantial root, and at length given rise to serious symptoms, existence is prolonged, except under the influence of constant medical care, for more than twelve months.

§ VIII. And this leads me to the subject of treatment. Palliation of suffering was plainly all that could be hoped for in the case; the period had passed when art might have aimed even at slightly prolonged life. The amount of debility rendered it hazardous to adopt any active means for the

reduction of the dropsical effusions; we, consequently, contented ourselves with administering diuretics and mild purgatives. A few days after admission, the evidences of pulmonary congestion increasing to a fearful point, we ventured to draw a few ounces of blood by cupping from the back, and with obvious relief to the circulation through the lungs. But the loss of even the small quantity abstracted, four ounces, rather weakened the patient: we felt the remedy was not one to be lightly returned to. The cough was relieved by ethereal tincture of lobelia and squills; the sickness mitigated but never totally removed, by hydrocyanic acid, creosote, extract of stramonium, and blisters to the epigastrium, with and without the endermic use of morphia.

ORIGINAL COMMUNICATIONS.

ON CONGELATION AS AN ANÆSTHETIC

IN OPERATIONS PERFORMED WITH THE KNIFE OR CAUSTIC.

By JAMES ARNOTT, M.D.

(Continued from page 136.)

II. Is congelation very limited in its applicability?

It may be used in every external operation and many internal ones, but not with the effect of rendering them all completely painless. Amputation of the fingers has been reported to have been so performed without the least suffering, (a) but in the larger amputations, and in the excision of large tumours, it is only the pain proceeding from the incision of the skin and adjoining textures (which, however, is the severest), that can as yet be thoroughly prevented in this way. The tedious dissection of the skin from the muscles can thus be effected without suffering, but the sudden stroke of the knife, that severs the mass of muscles could, probably, only be rendered painless by a modification of the process of congelation, which might be objectionable. The cold produced by a strong semi-fluid frigorific mixture, applied to the limb by a gutta-percha funnel, or by a cold solution flowing to and fro through a muff-shaped bag, for a longer time than usual, and after the circulation has been stopped by a tourniquet, would, no doubt, penetrate very deeply; or intense cold might be applied in various manners after the first incision; but it is questionable whether, if absolute insensibility were required, it would not be better to secure this by a combination of anæsthetic processes of different kinds. Could not, for example, momentary insensibility be safely produced by the fainting caused by suddenly withdrawing the blood from the trunk into the limbs by means of the apparatus (erroneously supposed to be of French origin) which acts on the principle of the cupping-glass? The deeper incision in lithotomy is almost beyond the reach of cold, but it is to be hoped that this proceeding will soon be much restricted. The startling fact, that half the operations for stone on the adult have, during the last three years, proved fatal in the London Hospitals, ought to bring the question again before the Surgeon, whether so fatal an operation is the *ne plus ultra* of the art; or whether, instead of disputing how the lithotomy knife should be held, it would not be better to consider if it might not, in the majority of cases, be altogether laid aside, and a proper dilator, introduced from the perinæum, and assisted, when necessary, by a suitable lithotriptor, substituted. The secret of Mr. Liston's success was not, I conceive, any peculiar manner of holding the knife, but his trusting more to dilatation than cutting in effecting a passage for the stone. It may be stated, in corroboration of this, that he promised the writer of these remarks that he would, on the first convenient opportunity, make a thorough trial of the fluid dilator in the extraction of stone, which had already been successfully used by Sir Astley Cooper.

For internal operations, congelation is more useful than might at first be supposed. In my recent publication upon "Cancer," the mode of employing it in affections of the uterus and rectum is described. In dental surgery it can also be accurately limited to the part to be operated upon. The *Boston Medical Journal* for June last contains an interesting account of this employment of it by a Physician, who had several fangs extracted from his own jaw by a dentist in New York, with-

(a) I am informed, that at a meeting of the Harveian Society during the present week another report was read of the painless amputation of the fingers under congelation, by one of the members.

out, as he says, "any pain or suffering whatever." "The process of freezing was in no way disagreeable; not even was any particular sensation of coldness recognised."

Chloroform has not generally been considered applicable in certain operations and certain conditions of the system. In tracheotomy, for example, the highly disturbed state of the system usually existing in croup forbids it. We have been lately furnished with a report of the use of congelation in this operation, now, by the indefatigable efforts of M. Trousseau, becoming so common and useful. In strangulated hernia some have objected to chloroform, on account of the evil effects (which also render it objectionable in operations for cataract) likely to proceed from the violent vomiting excited by it. I formerly alluded to a case in the Bradford Hospital, where the substitution of congelation for chloroform in hernia, partially reduced *en masse*, enabled the patient, by retaining his consciousness, materially to assist the Surgeon in his operation. Would not the refrigeration of the bladder in lithotomy be preferable to the exhibition of chloroform, independently of the question of safety, on account of its antiphlogistic, as well as its anæsthetic virtues?

III. Is congelation itself a painful process?

By the Surgeons who have employed congelation in operations it is spoken of as producing no greater uneasiness than is caused by the application of mustard; and if a little trouble be taken in gradually lowering, and afterwards raising the temperature, there would not be even this degree of uneasiness. On a late occasion I graduated the temperature by interposing, during the first part of the process, a piece of thin muslin, between the gauze bag containing the frigorific and the skin. There are more perfect modes elsewhere described, but they are rarely necessary. The uneasiness caused by congelation, were it twice as great as it is, would be as nothing when compared with the headache, sickness, and prostration, so often caused by chloroform.

IV. Has congelation been followed by any untoward effects?

A strong prejudice existed at first to congelation, because it did not immediately occur that, although a part long congealed may be injured, or even destroyed, by the cold, the stoppage of the circulation for a short period might be produced with as little risk by cold as by the tourniquet. This proceeding has now been in use for several years, yet no instance of greater injury has occurred than a protraction, in one or two instances, of the healing of the wound, in consequence of the reparative powers being too much weakened by an unnecessary continuance of the congelation. If properly used, it restrains the hæmorrhage, promotes healing by the first intention, (as is shown by Dr. Pettigrew's series of cases in the *Medical Times and Gazette*, February 16th, 1856,) and from being a powerful antiphlogistic, prevents the erysipelatous and other inflammatory affections which obstruct the cure and occasionally prove fatal. Congelation continued for several minutes, will now and then cause an effusion under the cuticle, and the separation or desquamation of this membrane, but such an effect is of no importance as respects the healing process.

V. Is congelation troublesome in its application?

We must not, in estimating the trouble from administering chloroform and other vapours of similar character, think only of that part of the process which consists of the inducing of anæsthesia; we must likewise take into account the trouble often experienced in recovering the patient from their effects. No conscientious surgeon administers chloroform without having sufficient assistance at hand to restrain the involuntary movements of the patient, and without furnishing himself with the various apparatus that may be necessary for restoring the animation so often suspended by it.

A bit of ice dipped in salt and applied to the skin will in a few seconds congeal it; and a bag or net of thin gauze, containing the same materials in a pulverized form, which is the apparatus usually employed, is hardly more troublesome in its application. There are, it is true, more complicated modes, required for particular purposes; but having published a treatise containing minute directions for the use of anæsthetic cold, instead of unnecessarily protracting the present communication by further descriptions of apparatus, I shall refer the reader to this treatise, or to two papers on the subject in the *Medical Times and Gazette*, Nov. 11, 1854; and Nov. 24, 1855.

The objection hitherto to the use of cauteries, whether

actual or potential, has been, the long enduring and severe pain occasioned by them; and this has been deemed, especially by English surgeons, so great as to overbalance the acknowledged valuable properties possessed by these remedial measures. This objection has been removed by congelation. Mr. Langston Parker has recently published an account of his successful use of caustic and congelation in the treatment of cancer; and the last number but one of the *Medical Times and Gazette* contains a paper by Dr. Simpson on the same subject. Dr. Simpson, indeed, only speaks of the use of anæsthetics generally, as a preventive of the long-continued suffering from caustic; but it can hardly be supposed that he alludes to those which affect the whole system, when such as produce local insensibility alone are amply sufficient. Congelation, besides, possesses the great additional advantage of preventing the occurrence of erysipelas, to say nothing of its peculiar efficacy, from another principle of action, in cancerous disease. I have already mentioned, in a former paper on Congelation, the use which has been made of it in preventing pain from the actual cautery, by Mr. Lawrence and Professor Nélaton.

London.

P.S.—While the above was in the printer's hands, a valuable statistical report appeared in this Journal, giving the mortality from amputations in St. George's Hospital during the last six years. As it bears on opinions respecting the effects of chloroform, which I lately expressed in the same Journal, I shall probably notice it at length on some future occasion, and show that no statement of facts more confirmatory of the truth of these opinions has as yet been published. The mortality, after deducting the amputations of the forearm, is the average mortality of the whole of the London Hospitals during the last three years and a half, or about 12 per cent. above the mortality before the introduction of chloroform. The reporter prefers Mr. Phillips' tables of the former rate to that which I have given (notwithstanding their having been rejected by the Council of the Medico-Chirurgical Society); but the difference between them is too immaterial to affect the argument. Even Dr. Simpson's table of the mortality before chloroform (constructed on unexceptionable data, though including a disproportionate number of unhealthy hospitals) shows a difference of 10 per cent. Any comparison between the mortality of the London and Paris Hospitals cannot be admitted in this inquiry; for it has been long universally acknowledged that our Hospitals have, in respect to salubrity, and particularly recovery after amputations, formed a striking contrast to those of Paris. The difference is not greater between the mortality from cholera in different localities and classes of patients. The interesting statement of the cases of pyæmia at St. George's Hospital, contained in this report, shows that their annual number has hardly increased more than the number of surgical cases or operations during the last thirteen years; and, while it would tend to prove that chloroform does not predispose to pyæmia particularly, or more than to the other fatal conditions that follow amputation; it shows clearly that there has been no such increase of this affection as would justify our calling it an epidemic during any part of the recorded period.

FATTY DEGENERATION OF BLOOD- VESSELS IN THE BRAIN (?)

CASE OF PERFECT RECOVERY FROM THREE CONSECUTIVE APOPLECTIC SEIZURES, FOLLOWED BY COMPLETE PALSY OF THE SPHINCTERS, AND OF BOTH UPPER AND LOWER EXTREMITIES, IN A GENTLEMAN AGED SEVENTY.

By E. J. SHEARMAN, M.D.

A very corpulent and fat gentleman, aged 70, six feet high, weighing more than twenty stones, who has had the *arcus senilis* in both eyes, *very plainly, for the last 15 years*; and has never had any disease of the cornea, sclerotic coat or optic nerve; having lived full and well all his life, kept a sumptuous table, and indulged much in butter, sugar, and most nutritious articles composed principally of carbon and hydrogen, was attacked in the year 1850 with pain in his heel to such an extent that he could not use his foot. There was no external appearance of disease. He took the best opinions in England, Scotland, and Ireland as to the nature and remedy for this; every physician and surgeon gave him

a different opinion, and recommended a different remedy; *none did him any good*. The pain lasted many months, and he could not bear the least weight upon it. He continued to live well and keep himself up, and at last the pain left him, so that he could walk as usual. The following year he was seized with pain in his right great toe, without any evident cause, —of very much the same character, but not half so violent. A blister of dirty serum, following a crimson livid discolouration, formed on the toe; this, after lasting many months, eventually healed up without the skin breaking. The beginning of 1853 he had another similar attack in his toe; *which increased when his usual quantity of wine was not allowed*. The skin broke, and a very unhealthy-looking sore made its appearance. *This got well again when more lean animal nourishment and wine were taken*.

In the beginning of August, 1854, he suffered much from headache and deranged liver, which resisted the usual remedies.

On the morning of the 29th of August, 1854, he was found in bed in such a condition that it was necessary to rouse him before an answer could be obtained, and he then dropped off into a comatose sleep again. In the course of two hours *his mouth was drawn to the right side; he was perfectly unconscious; somewhat stertorous, and could not be roused; pulse slow and full; pupils dilated, but just sensible to light*. Some blood was taken from his arm, *just sufficient to relieve the coma and paralysis of the mouth*; croton oil instantly administered, and his legs covered with mustard cataplasms.

In about 3 hours the croton oil began to operate; and, in the effort to evacuate his bowels, another apoplectic seizure came on, with perfect coma and stertorous breathing, which again *drew his mouth to the right, and completely paralysed every muscle*. *He lay in bed like a lump of lead*; pupils dilated unequally and insensible to light. He was immediately bled again, *carefully avoiding taking too much*; and he again rallied so far as to move his legs, but his arms remained slightly paralysed, and his *tongue drawn to the left side* for more than 14 days. He lost his memory for names, words, etc. But he gradually recovered from this attack, and in three weeks walked once, cautiously, into the adjoining room.

On the 8th of September, 1854, he was found at the side of the bed in a perfect state of coma, with stertorous breathing; *mouth drawn, this time, to the left*; pupils insensible and dilated; pulse slow and feeble; lost the power over both sphincters, and all the voluntary muscles, as well as consciousness. He was immediately removed into bed, where he laid for 5 weeks like a log of wood, with every limb paralysed; for if either arms or legs were raised, they dropped as if they were dead. His pulse was so feeble that he was not bled. Purgatives; ice to the head; counter-irritation, and the gradual introduction of mercury through the skin, pushed to slight ptyalism, at last began to tell upon his symptoms. He was so perfectly unconscious and comatose, that he could not be roused by any means; he had no power over his speech; all his evacuations came into the bed, and he had lost so much voluntary muscular power that only sufficient was left to allow him to swallow milk when it was put into his mouth with a tube, (of which he took about a gallon a day.) As he had very little puffing of the paralysed cheek to and fro, in respiration, I always gave a favourable prognostication of the case.

Under these circumstances, as he did not rapidly sink, I procured an excellent spring-bed with a closet for his evacuations; and he laid on his back in one position for 5 weeks, without ever being moved except for the purpose of cleanliness, and the application of solution of nitrate of silver to his excoriated back. This plan succeeded so well that he never had a decided bed sore.

At the end of about 5 weeks, he first recovered the use of the sphincter of his bladder; then of the anus; and gradually, but very slowly, regained consciousness, memory, and the voluntary power over all his extremities, the right side being the first to recover. As soon as the last attack would allow, he was well kept up with lean animal diet, and the moment he could bear it, returned to his usual quantity of wine.

When he began to talk, he had quite forgotten the names of persons and places, and used wrong words to express his ideas, but had no impediment of speech. I kept him upon a strictly lean animal diet; debarred him from any aliment likely to occasion fatty assimilation; and he has now, in

about 2 years, so far recovered, that no person would suspect he had ever laboured under either apoplexy or palsy; in fact, he is quite as well as he was 10 years ago, and attends to his magisterial business as usual, although he is now 72 years of age.

As he began to improve of the apoplectic symptoms, without any evident cause, he was seized with a slight pain in the old toe; a blister formed, surrounded by a large livid circle. This broke eventually, and a most unhealthy-looking ulcer appeared. About the same time a livid spot on the other great toe appeared, which did not form a blister. His feet were always cold. The ulceration had no tendency to form healthy granulations; but, in progress of time, and in consequence of a more stimulating diet, it gradually became smaller, but it has never completely healed. He has never suffered from pain in the toes or heel since the beginning of the attack.

His father had senile gangrene in his foot. His mother, whom I attended, died of apoplexy, and had a very marked *arcus senilis*. His uncle died of senile gangrene in his foot, but I do not know whether he had *arcus senilis*.

This gentleman was seen several times during the five weeks which he laid comatose and paralysed, by Mr. Douglas Fox, of Derby, and my son, Dr. Charles Shearman, of Sheffield.

The great features of this case are the following:—

1. This gentleman's father died of gangrena senilis; mother of apoplexy; he himself had had two attacks of low aplastic inflammation on the great toe, allied to the character of inflammation resulting in senile gangrene; also with marked *arcus senilis*, of many years' duration, in both eyes; of lymphatic temperament, and great tendency to obesity and deranged biliary secretion, which, on one occasion, took the form of acute hepatic inflammation.

2. Disorder of sensation and the mental faculties preceded loss of volition in the first fit, which retreated in the order of sensation first, and volition afterwards. In the second fit they were concomitant in their inroad, and retreated in the order of the first fit. In the third fit, coma first, and volition subsequently disappeared. The faculties of the mind were affected the longest time; volition next in order; sensation the shortest.

3. From there being no spasm, no want of power of co-ordination of muscular motion subsequent to the re-establishment of volition, there appears no reason to locate the mischief in the cerebellum. The medulla oblongata must have been intact, and also the pons. From the character of the order of access and retreat of symptoms, the mischief must have been in, or around, the optic thalamus in the first instance; and on and around the corpus striatum in the second.

4. The temperament, state of secondary assimilation, and marked tendency, to a fatty or calcareous degeneration in this patient, indicate plainly a want of active nutrition in the small blood-vessels and tissues of the system, which, when subject to active congestion, must result in a great facilitation of rupture of those vessels, and evolution of their contents. From there being now no symptoms whatever of white softening of the brain, *neither at any time kidney disease*, the pathology is limited to rupture of the small blood-vessels of the pia-mater; for the amount of extravasation could not have been large, or more serious and rapid results would have ensued. The probable character of disease of these vessels, and the locality of the mischief as interpreted by the order and kind of symptoms, would lead me to assign the attack to be rupture of the vessels supplying the optic thalamus and corpus striatum; in fact, fatty degeneration of these vessels on both sides.

Rotherham.

ON THE DETECTION OF LEAD IN THE URINE IN CASES OF LEAD POISONING.

By EDWARD SIEVEKING, M.D., F.R.C.P.

Assistant-Physician to St. Mary's Hospital, etc.

THE masterly memoir by M. Melsens, on the Treatment of Metallic Poisoning by Iodide of Potassium, which appeared some time since in the *British and Foreign Medico-Chirurgical Review*, (a) has caused the iodide of potassium to be more generally employed for the purpose of eliminating metallic

poisons that have combined with the tissues of the body. The views promulgated by M. Melsens were supported by strong experimental and clinical evidence, and so far as my opportunities of witnessing and treating cases of metallic poisoning have since enabled me to judge, I should be disposed fully to corroborate the remarks of M. Melsens with regard to the eliminative power of the iodide of potassium in these cases. I have, in fact, in numerous cases of lead poisoning, to which I may take another opportunity of adverting more fully, found that the iodide of potassium sufficed for the cure of the patient. Dr. Parkes, (b) since the publication of the memoir of M. Melsens, has published a paper on the elimination of lead by iodide of potassium, in which he filled up a lacuna left in the memoir, by giving the proof, that during the administration of this remedy the lead actually passed off by the kidneys. The following may be offered as a further corroboration of the fact that the lead is eliminated by this channel. It were well if we were able to demonstrate with equal certainty the mode in which organic poisons are eliminated by iodide of potassium, than which we possess no more certain and trustworthy alterative.

A plumber, aged 34, was admitted into St. Mary's Hospital, under the care of Dr. Chambers, on the 7th January, 1857. He had had colic three or four times previously, but had experienced no symptoms of saturnine paralysis. On the 7th of January he was suddenly attacked with epileptic fits. He had a succession of fits, which lasted for thirty-six hours. When I saw him on the 14th of January he stated that he had no recollection of anything that happened from the time of his admission into the hospital to the 12th of January; that he woke up with severe headache occupying the entire head, with vertigo, and found that he had lost the power of moving the left leg and the right arm; the left arm and the right leg continued normal both in regard to sensation and motion. There was decided diminution of sensation in the affected limbs, and the right hand was in a permanent semiflexed condition, with very little power remaining of opening or closing the fingers. On first recovering consciousness the people in the ward seemed to him as small as dolls, and the opposite side of the room seemed to be sunk forty feet below his own level. These erroneous impressions he was conscious of at the time, and they disappeared in four days. The urine was very scanty. There was a marked blue line round the margin of the upper and lower gums. I would remark that on testing the sensibility of both hands with an æsthesiometer, (an instrument which I have had constructed for the purpose of measuring the amount of sensibility in different parts of the body,) I found no deviation from the normal standard on the 16th of January, as the patient was able with the tips of the fingers of either hand to distinguish a distance of less than 1-10th of an inch; at the same time that the patient, when I first saw him, complained of want of sensation in two of the limbs, the same limbs were very tender, and a slight pinch caused pain, so that we had to deal with that singular perversion of the sensitive function to which the term *anæsthesia dolorosa* has been applied, though without regard to the etymology of the words. This susceptibility to pain remained after the ordinary tactile sensibility appeared to be restored. My friend, Dr. Markham, who had charge of the patients of Dr. Chambers, kindly at my request prescribed on the 10th of January the iodide of potassium in 10 grain doses, three times a-day. A rapid improvement was perceptible. The amount of urine rapidly increased; but, although on two occasions after commencing the iodide of potassium the urine of at least twelve hours was tested for lead, none was found.

The fact that Dr. Bernays himself, the able clinical lecturer at St. Mary's Hospital, kindly charged himself with these analyses, will be a sufficient guarantee that no lead was present. I again ordered the urine to be collected from the 20th to the 21st of January, and although probably only about one half of the urine secreted had been preserved, owing to the remainder having been discharged in defecation, I obtained 860 cubic centimeters, of a reddish-yellow hue, and turbid. This was evaporated down nearly to dryness; I boiled the residue with nitro-hydrochloric acid, and filtered. The filtrate, on the addition of sulphide of ammonium or of sulphuretted hydrogen, gave a copious precipitate of the sulphuret of lead.

(b) British and Foreign Medico-Chirurgical Review, April, 1853.

As my only object in publishing this case is to offer a further proof of the eliminative action of the iodide of potassium in lead poisoning, I will dwell no further upon it; otherwise the occurrence of the epileptic seizures, the peculiar optical illusions, and especially the paralysis of opposite members of the upper and lower half of the body, would offer an ample theme for discussion.

REMARKABLE CASE OF MIDWIFERY.

By CHARLES FREDERICK CLOUGH, M.R.C.S. Eng.
L.S.A., Lic. Mid. London.

THE following case occurred to me in private practice, and as I thought it might prove interesting to some of my brother practitioners as well as being important, I have considered it desirable to publish it.

Mrs. H., of about 26 years of age, of exsanguine and strumous aspect. First confinement. Married about 10 months. Has suffered very little during her pregnancy, though formerly her health was not good. I had attended her previous to her marriage for dysmenorrhœa and cachectic ulcers of the legs.

I was engaged to attend her in her confinement about a fortnight before the following events took place, and heard nothing of her till Dec. 23rd, 1856, when her mother-in-law came to tell me that she had been delivered of a fine boy, and without any pains, excepting a slight one when the child was born. I went immediately to the woman, when she told me that at about 7 o'clock a.m. her husband got up to attend to his business, when she remarked that she had a little griping pain, but nothing like a labour pain. He asked her if he should fetch me; but she said No, it was not labour, and not worth while; and the consequence was he went to his business and left her. A short time afterwards she got up, and having a desire to go to stool, she thought that she would use the chamber vessel. Directly she seated herself upon it, and while straining a little, she felt a "sharp straining pain," and, to use her own expression, "the child was on the floor in a moment." Her mother-in-law came in directly, and calling in some old woman near, they separated the child. The placenta was some time in following, but still it came away without any pain. I was fetched as soon as they could send for me, and when I arrived, I found the child—a fine boy, quite a nine months' one—in bed and dressed, lying at his mother's side.

She had no unpleasant symptoms after, and is now going on very well, (as is the child also,) being in good health and spirits, and with abundance of milk.

I may as well mention here before concluding, that she lost rather a large quantity of blood, there being quite a pool around her, after the placenta came away.

Remarks.—I think that the foregoing is an important case; for the consideration of medical jurists especially; for had this woman been unmarried, and gone to a common privy, the child would inevitably have dropped down, and most probably died asphyxiated; and she, being frightened, have kept it secret, of course expecting no one to believe her tale; and thus had the child been found in such a place, an innocent victim would have been hurried to a court of justice on a charge of concealment of birth and infanticide, and most likely sentenced to an ignominious, or severe punishment.

Workshop, Notts.

CAUSES OF MORTALITY IN LONDON 1856.—The deaths under each of the general classes of disease were as follow:—Of the zymotic class, 12,859; dropsy, cancer, and others of uncertain seat, 2474; tubercular class, 9731; of brain, nerves, &c. 6088; of heart, &c. 2313; of respiratory organs, 9457; of digestive organs, 3061; of kidneys, &c. 783; of uterus; viz. puerperal disease, &c. 418; of joints, bones; viz., rheumatism, &c., 409; of skin, &c. 162; malformations, 191; debility from premature birth, &c. 1573; atrophy, 1837; age, 2130; sudden, 530; violence, privation, &c. 2299.

THE LONDON
PRACTICE OF MEDICINE AND SURGERY.

STATISTICAL REPORT OF THE PRINCIPAL
OPERATIONS

PERFORMED DURING THE LAST THREE MONTHS OF 1856.

(Continued from page 140.)

EXCISION OF THE BREAST, AND OF TUMOURS
CONNECTED WITH IT.

Number of cases 28. Recovered 26. Under treatment 1. Died 1.

Case 1.—The London: Mr. Luke.—A woman, aged 47; excision of the entire gland on account of scirrhus of two years' duration. Some small glands from the axilla were also removed. Recovered. *Case 2.*—St. Thomas's: Mr. Macmurdo.—A woman, aged 40; excision of the entire gland on account of scirrhus. Recovered. *Case 3.*—St. Thomas's: Mr. South.—A woman, aged 42; excision of the entire gland on account of scirrhus of six months' duration. Recovered. *Case 4.*—St. Thomas's: Mr. Simon.—Excision of the entire gland on account of encephaloid (?) disease of three years' duration. Recovered. *Case 5.*—Guy's: Mr. Hilton.—A woman, aged 27, in good health. Excision of a mammary glandular tumour, the size of half an orange, and of seven years' duration. Recovered. *Case 6.*—Guy's: Mr. Hilton.—A woman, aged 40; excision of the whole gland on account of a very large ulcerated cancer of eight months' duration. The wound left was very large. She was gaining flesh and doing well until about a month after the operation, when an attack of pneumonia occurred, of which she died after a few days' illness. No autopsy. *Case 7.*—University College: Mr. Erichsen.—A woman, aged 46, excision of the left breast on account of cystic sarcoma. Erysipelas and symptoms of pyæmia have since occurred. Suppuration of one eyeball, and ulceration of the skin on the chest. She is, however, now somewhat improving. *Case 8.*—Guy's: Mr. Cook.—A woman, aged 45, in good health; excision of the entire gland on account of a sloughing cancer of five months' duration. Recovered. *Case 9.*—Guy's: Mr. Cook.—A woman, aged 49. Removal of the entire breast on account on scirrhus. Recovered. *Case 10.*—Guy's: Mr. Cook.—A woman, aged 41, in good health. Excision of the entire breast on account of scirrhus. Recovered. *Case 11.*—University College: Mr. Erichsen.—A woman, aged 54, from whom the breast had been removed a year before. The disease had returned in the cicatrix, and the axillary glands were enlarged. Excision of the recurrent tumour, and also of the diseased glands. Recovered. *Case 12.*—Guy's: Mr. Cooper Forster.—A woman, aged 29. Excision of part of the breast, on account of an hydatid cyst of six years' duration. Recovered. *Case 13.*—St. George's: Mr. Cutler.—A woman, aged 24, in good health. Excision of a mammary glandular tumour. Recovered. *Case 14.*—King's College: Mr. Fergusson.—A woman, aged 29. Excision of an athromatous cyst. Recovered. *Case 15.*—King's College: Mr. Fergusson.—Excision of part of the breast on account of scirrhus. Recovered. *Case 16.*—King's College: Mr. Fergusson.—A woman, aged 45. Excision of the breast on account of a fibro-cystic tumour of three years' duration, and the size of an orange. Recovered. *Case 17.*—The Metropolitan Free: Mr. Childs.—A woman, aged 45. Excision of the entire breast on account of an enormous growth of scirrhus. The disease returned before the wound was healed, and the woman left the hospital. *Case 18.*—The Metropolitan Free: Mr. Hutchinson.—A woman, aged 39, from whom a scirrhus tumour had been removed four months previously. The disease had returned. Excision of the returned growth and the cicatrix. Recovered. *Case 19.*—King's College: Mr. Fergusson.—A woman, aged 56. Excision of a small scirrhus tumour. Recovered. *Case 20.*—Guy's: Mr. Cook.—A woman, aged 26, in good health. Excision of a mammary glandular tumour of three years' duration. Recovered. *Case 21.*—King's College: Mr. Partridge.—A woman, aged 30, the subject of acute scirrhus of the breast. The whole gland was removed. Recovered. *Case 22.*—University College: Mr. Erichsen.—A woman, aged 56. Excision of the entire gland on account of scirrhus. Recovered. *Case 23.*—Guy's: Mr. Birkett.—A woman, aged

40, in poor health. Excision of the entire gland, on account of a large mass of medullary cancer of seven months' growth. Recovered. *Case 24.*—Guy's: Mr. Birkett.—A girl, aged 22, from the structure of whose breast an adenocoele of eight months' growth was excised. Abscesses in the breast followed, and greatly delayed the healing. Recovered. *Case 25.*—Guy's: Mr. Birkett.—A woman, aged 41. Excision of the entire gland, on account of scirrhus of nine months' duration. Recovered. *Case 26.*—Guy's: Mr. Birkett.—A woman, aged 30. Excision of the whole gland on account of infiltrating scirrhus of two years' duration. Recovered. *Case 27.*—Guy's: Mr. Birkett.—A woman, aged 41. Excision of the whole gland, on account of scirrhus of nine months' duration. After the operation she had pleuro-pneumonia, which nearly ended fatally. Recovered. *Case 28.*—Guy's: Mr. Birkett.—A woman, aged 58, in good health, in whose left breast a growth of scirrhus had been slowly developing for five years, and was now on the point of ulcerating. Local anæsthesia by cold was attempted, "but was a total failure." Only a part of the gland was removed. Recovered.

REMOVAL OF MALIGNANT GROWTHS.

Number of cases, 12; recovered, 12.

Case 1.—Guy's: Mr. Hilton.—A man, aged 33. Under care for a large fungoid growth in the palm, about twelve months' duration. It adhered closely to the tendons, and passed under the annular ligament. The man was in reduced health. A free excision was performed, and the wound appears to be healing. *Case 2.*—Guy's: Mr. Hilton.—A woman, aged 72, in good health. Excision of the right labium on account of epithelial cancer of five years' duration. Recovered. *Case 3.*—Guy's: Mr. Hilton.—A woman, aged 45, in good health. Excision of a large epithelial cancer of the inside of the cheek and angle of the mouth of six months' duration. Recovered. *Case 4.*—King's College: Mr. Fergusson.—Excision of an epithelial cancer the size of a penny piece from the side of the face. Recovered. *Case 5.*—King's College: Mr. Fergusson.—A farm labourer, aged 60. Excision of a large ulcerated epithelial cancer from the back of the hand. The disease was of two years' duration. Recovered. *Case 6.*—St. Thomas's: Mr. Simon.—A man, aged 28. Excision of an epithelial cancer of the lip. Recovered. *Case 7.*—St. Bartholomew's: Mr. Lawrence.—A healthy woman, of middle age. Excision of part of the hard palate and floor of the antrum on account of ulcerated carcinoma. Recovered. *Case 8.*—Guy's: Mr. Cook.—A man, aged 37, in good health. Excision of an epithelial cancer from the lip. Recovered. *Case 9.*—Guy's: Mr. Cook.—A man, aged 56, in good health. Excision of the whole nose on account of ulcerated epithelial cancer to which chloride of zinc had previously been applied. The edges of the sore having taken on cancerous action in two places have since been excised, and the wound appears likely to heal. Under treatment. *Case 10.*—University College: Mr. Erichsen.—A woman, aged 62. Excision of a malignant tumour from under the lower jaw. Recovered. *Case 11.*—Guy's: Mr. Birkett.—A woman, aged 31. Excision of an epithelial cancer from the labium. Recovered. *Case 12.*—The London: Mr. Curling.—A man, aged 38. Excision of a malignant tumour, the size of a hen's egg, from under the outer edge of the pectoralis major. It was of sixteen months' duration. Recovery.

REMOVAL OF NON-MALIGNANT GROWTHS.

Number of cases 43. Recovered 40. Under treatment 2. Died 1.

Case 1.—St. Bartholomew's: Mr. Lawrence.—Removal by ligature of a pulsating tumour from the thigh of a cachectic man. (For detail see *Medical Times and Gazette* for December 13, p. 594.) Subsequent to the report secondary hæmorrhage occurred, and the patient sank from the consequent exhaustion. *Case 2.*—King's College: Mr. Fergusson.—Excision of a large indurated bursa from the front of the patella of a woman, aged 35. Recovery. *Case 3.*—University College: Mr. Quain.—A woman, aged 30. Excision of a small painful subcutaneous tumour. Recovered. *Cases 4, 5, 6, 7, 8, and 9.*—In these, cystic tumours were removed from various parts of the body; in all the wounds healed well. *Cases 10 to 25.*—In these, fatty tumours of considerable size were removed from different parts of the body, and in all the wounds healed well. *Cases 26 to 30.*—In these bursal tumours were

removed—all recovered. *Case 31.*—University College: Mr. Erichsen.—A man, aged 26. Excision of a nevoid tumour from the temple. Recovered. *Case 32.*—King's College: Mr. Fergusson.—A woman, aged 27. Excision of a fibro-cartilaginous tumour over the parotid, and of nearly three years' duration. Recovered. *Case 33.*—The London: Mr. Luke.—A woman, aged 45. Excision of an ulcerated fibrous tumour from the thigh, of some months' duration. Recovered. *Case 34.*—St. Bartholomew's: Mr. Skey.—A man, aged 30, the subject of a large cystic tumour in the neck. It had been punctured several times previously, but had always refilled. Mr. Skey dissected it out. In the operation the carotid artery and jugular vein were exposed, and some large branches wounded. Recovered. *Case 35.*—St. Bartholomew's: Mr. Lloyd.—A healthy woman, aged 50. Excision of a small tumour from over the right malar bone. Recovered. *Case 36.*—St. Thomas's: Mr. Simon.—Excision of a large warty growth from the tongue of a girl, aged 14. It was removed with scissors, and the wound healed in a few days. *Case 37.*—King's College: Mr. Fergusson.—A woman, aged 25. Excision of a fibrous tumour from the thigh. Recovered. *Case 38.*—Guy's: Mr. Callaway.—A woman, aged 26. Excision of an enchondroma from under the angle of the jaw, which had existed six years. Recovered. *Case 39.*—St. Bartholomew's: Mr. Lloyd.—A healthy man, aged 46. Excision of a cartilaginous tumour from the dorsum of the foot, which was connected with the metatarsal bones. The metatarsal bones of the three middle toes were necessarily taken away. Recovered. *Case 40.*—Guy's: Mr. Cock.—A woman, aged 39. Excision of a submuscular fibrous tumour from the thigh. The disease returned in the recurrent—fibroid form, and a second operation was performed four months afterwards. (For details of this case see the *Medical Times and Gazette* for January 17, 1857, page 64.) *Case 41.*—St. George's: Mr. Cutler.—A woman, aged 26, in good health. Excision of a fibro-plastic tumour from the cheek. Recovered. *Case 42.*—The London: Mr. Wordsworth.—A woman, aged 28, came under care on account of a flat rounded tumour in the palm of the hand. It was removed, together with the middle finger, and the whole of its metacarpal bone. The growth was attached to the tendons and periosteum, and was of recurrent fibroid structure. The parts healed well. (See *Medical Times and Gazette* for December 20, page 622; and also, for December 6, page 570.) *Case 43.*—Guy's: Mr. Birkett.—A woman, aged 41, in good health. Excision of large fibro-nucleated growth from the right cervico-parotid region. It was well circumscribed, and surmounted by a thin envelope. Recovered. *Case 44.*—Guy's: Mr. Birkett.—Excision of large condylomatous indurations from the labia. Recovered. *Case 45.*—The Metropolitan Frec: Mr. Hutchinson.—A prostitute, aged 26, in very bad health, and the subject of constitutional syphilis. Excision of a large penudous mass from the nympha, the size of an infant's head. She was exceedingly ill after the operation, from dysentery, pleurisy, and acute bronchitis, all of which yielded immediately on the commencement of specific treatment by the iodide of potassium, and the wound healed. Recovered. *Case 46.*—Guy's: Mr. Hilton.—A man, aged 23, in good health, the subject of an enchondromatous growth in the parotid region, of twelve years' duration. Four years ago it had been partially excised at another hospital, and facial paralysis had resulted. It had again grown, and was now the size of a small orange, but flattened. The dissection requisite for its removal was most extensive. The pharynx was exposed, the external carotid divided and tied. Free hæmorrhage attended the operation. The man had severe erysipelas of the head and face after the operation, but ultimately recovered well.

TRACHEOTOMY AND LARYNGOTOMY.

Case 1.—The Middlesex Hospital.—A woman, aged 30, under care on account of chronic laryngitis. Fatal suffocation being imminent, laryngotomy was performed by Mr. Cribb, the House-Surgeon. The operation was attended with complete relief. The patient up to the present time still wears the canula, and is unable to breathe without it.

Case 2.—The London.—A woman, in a very advanced stage of phthisis, and the subject also of laryngeal disease. Death from suffocation was threatened, apparently from impediment in the larynx, and tracheotomy was accordingly performed by Mr. Debenham, the House-Surgeon. An enormous quantity of semi-purulent fluid was brought up through the canula, and

some relief was afforded. Death, however, followed thirty-six hours after the operation. At the autopsy, in addition to extensive disease of the lung, much inflammatory thickening of the mucous membrane of the larynx was found. There were also two small ulcers beneath the *corde vocales*.

Case 3.—St. Bartholomew's.—A delicate woman, aged 53, admitted under Dr. Jeaffreson for chronic laryngitis, of six weeks' duration, during which time she had been repeatedly leeches and blistered. The symptoms had very much increased in severity for the two days previous to her entrance into the hospital. As the dyspnoea became urgent, and the exhaustion extreme, tracheotomy was performed by Mr. Chippendale, House-Surgeon, a few hours after admission. For four days she progressed very favourably, but on the fifth profuse diarrhoea having set in, she died. On examination, the margins of the wound were seen to be healthy, but suppuration had extended downwards along the left side of the trachea to the space between it and the œsophagus, involving also the posterior œsophageal fascia as far as the fourth dorsal vertebra. The loose cellular tissue of the mediastina was distended with air. The left lung was partly collapsed, the pleural sac containing turbid fluid, and lined with lymph. The lower lobe of the right lung was in a state of grey hepatization. Liver coarsely granular. The mucous membrane of the trachea below the opening, which was made from the 4th to the 8th ring, was much congested, and presented some small patches of sloughing ulceration. The larynx and that portion of the trachea above the wound was perfectly healthy, but the mucous membrane of the epiglottis was wrinkled, as if it had been in an œdematous state.

Case 4.—St. George's: Mr. Pollock. A girl aged 6, admitted under Dr. Fuller's care on account of croup. Suffocation having become imminent, tracheotomy was performed. Complete relief was obtained, and the child recovered well.

REMOVAL OF EXOSTOSES.

In three cases exostoses from the terminal phalanx of the great toe have been removed; in all the cases the wounds have healed well. *Case 4.*—Guy's: Mr. Cock. A girl, aged 16, in good health. Excision of an exostosis the size of a thumb-end, in the lower part of the femur. Recovered. *Case 5.*—Guy's: Mr. Hilton.—A girl, aged 12, in good health. Removal of an exostosis, the size of a marble, from the upper and inner part of the tibia. It was known to have existed for three years, and had latterly given her much pain. The wound healed slowly. Recovered. *Case 6.*—University College: Mr. Erichsen. A woman, aged 22, from whom was removed an exostosis of the lower jaw, situated just above the symphysis, and which had been gradually increasing for some years. Recovery.

OPERATIONS FOR NÆVUS.

In fifteen cases operations by the ordinary methods of ligature have been successfully performed. In all the nævus was cutaneous, and in most not of unusual size. The following cases are worthy of more detailed notice:—*Case 16.*—St. Bartholomew's: Mr. Wormald.—An infant, aged four months, the subject of a large subcutaneous nævus on the chest. The skin was not involved. Free crucial incisions were made over the tumour, and the flaps of skin dissected back. Two needles were then passed through its base, and a strong ligature applied. The growth sloughed out, but the application of nitric acid was subsequently required in two parts, where there appeared to be a tendency to re-development. *Case 17.*—The Metropolitan Frec: Mr. Hutchinson.—An infant, aged 4 months, the subject of a cutaneous nævus, the size of a small orange, under the angle of the jaw, and in the upper part of the neck. The skin immediately over the tumour was not involved, but there were several small cutaneous nævi adjacent to it. The tumour was exposed by a single vertical incision; and careful dissection having been made around it, a double ligature was passed through its base. Although tied as tightly as could be effected at the time, yet the ligatures did not induce sloughing of the tumour. The latter, however, consolidated, and the ligatures were allowed to ulcerate their way out through its base, which they did in about four weeks. No sloughing whatever occurred. The wound has since healed, and the tumour has been almost wholly absorbed. *Case 18.*—Guy's: Mr. Hilton.—An infant, aged 5 months, the subject of a large cutaneous nævus on the forehead. Several injections with the per-chloride of iron have

been practised, and after each the part injected has sloughed away. Under treatment. *Case 19.*—Guy's: Mr. Hilton.—A girl, aged 18, in good health, under care on account of a nævoid tumour in the substance of the left cheek. It was dissected out by elliptical incisions from the angle of the mouth, and profuse hæmorrhage occurred. Recovered. *Case 20.*—Guy's: Mr. Birkett.—An infant, aged eight months. Subcutaneous ligature was performed for the cure of a nævus in the right cheek. Cure.

EXCISION OF THE TESTIS.

Case 1.—King's College: Mr. Fergusson.—A man, aged 59, from whose scrotum a large fibrous growth had been excised (by Mr. Fergusson), three years ago, the testis being then left. It had recurred, and was now the size of an infant's head, involving also the testis. Excision of the whole was performed. Recovered. The testis was lost in the mass, which appeared to be of fibroid nature.

Case 2.—King's College: Mr. Fergusson.—A man, aged 33, the subject of strumous disease of the testis of six years' duration. It was the size of two fists. Excision. Recovery. In the specimen after removal, the proper structure of the testis could not be discovered.

Case 3.—Guy's: Mr. Hilton.—A man, aged 34, in fair health. The testis was removed on account of malignant disease, which had existed ten months, the growth being about as large as a fist. The lower part of the cord was thickened, and in the operation the inguinal canal was laid open, and the cord divided high up. The mass of disease was found to have pushed the greater part of the gland structure to the posterior part, and had not destroyed it. The man recovered well.

Case 4.—St. Thomas's: Mr. Mac Murdo.—A man, in fair health, aged about 50, under care on account of malignant disease of the testicle and cord following a blow. The gland was excised, and he recovered well. The disease proved to be medullary cancer.

EXCISIONS OF EPULIS.

Case 1.—St. Bartholomew's: Mr. Paget.—A woman, aged 35, the subject of epulis of the upper jaw. The whole was removed, together with the portion of the alveolar process, from which it grew, by means of the key-hole saw. Recovered. *Case 2.*—King's College: Mr. Fergusson.—A woman, aged 39, the subject of epulis of fifteen months' duration. Excision. Recovered. *Case 3.*—King's College: Mr. Fergusson.—A woman, aged 60. Excision of a large epulis from the upper jaw, of seven months' standing. Recovered. *Case 4.*—King's College: Mr. Fergusson.—A woman, aged 50. Excision of a large epulis growing from the alveolar ridge of the upper jaw, of three months' duration. After the operation rigors occurred. Death from pyæmia followed on the fifteenth day. No autopsy. *Case 5.*—King's College: Mr. Fergusson.—A boy, aged 16. Excision of a small epulis from the upper jaw, of three years' duration. Recovered.

AMPUTATION OF THE PENIS.

Case 1.—Guy's: Mr. Hilton.—A man, aged 27, in good health, and not the subject of phymosis. The penis was amputated on account of epithelial cancer. Recovered.

Case 2.—Guy's: Mr. Birkett.—A man, aged 54, admitted on account of epithelial cancer of the prepuce and skin of penis. The diseased integument, including the prepuce, was excised, no part of the glands being removed. The part healed well.

Case 3.—The London: Mr. Adams.—An elderly man, the subject of cancer of the penis, of two years' duration. Amputation. Recovery.

REMOVAL OF NECROSED BONE.

Operations of this class have been performed in 43 cases, of which 41 were either recovered, or are still under care, and two have ended fatally. Of the tibia in 11 cases, of the femur in 6, of the humerus in 7, of the radius in 4, of the ischium in 1, of the ulna in 6, of the sternum in 2, of the lower jaw in 6. The following are the fatal cases:—*Case 1.*—St. George's: Mr. Hawkins.—A boy, aged 15, in feeble health, under care on account of extensive necrosis of the lower part of the femur. A large sequestrum was removed. Death from pyæmia. Secondary deposits found in the lungs. *Case 2.*—King's College: Mr. Fergusson.—A man, in fair health, the subject of necrosis of the sternum. A small sequestrum was removed. The bone was subsequently perforated by carious

ulceration, and an abscess found in the mediastinum. Death from pericarditis and pleurisy three months after the operation.

PLASTIC OPERATIONS.

For single hare-lip, in twelve cases, all successful.

For double hare-lip, in four cases, all successful.

For contractions, in ten cases; in some with benefit, in others without.

Taliacotian Operation.—King's College: Mr. Fergusson.—A man, aged 32, whose nose had been destroyed to a great extent by syphilitic ulceration, four years ago. A new nose was made in the usual manner, by transplantation from the forehead. A very good result was obtained.

Staphyloraphy.—*Case 1.*—King's College: Mr. Fergusson.—A boy, aged 16, the subject of hare-lip, and of cleft palate. The cleft extended into the edge of the hard palate. Both deformities were operated on with complete success. *Case 2.*—St. George's: Mr. Pollock.—A girl, aged 18. A fissure of the soft palate was united on in the usual way, and with good success, a small anterior fistula alone remaining unhealed. *Case 3.*—St. Bartholomew's: Mr. Skey.—A man, aged 20. The usual operation was performed for a cleft dividing the whole of the soft palate. It was rendered difficult by the patient's irritability during its performance. Only partial union resulted.

For Perineal Fistula.—*Case 1.*—St. Bartholomew's: Mr. Skey.—A man, aged 40, had a large opening in the perineum, consequent on the removal of an impacted calculus four years ago. Mr. Skey pared its edges and united them on pins, but no union resulted. *Case 2.*—St. Bartholomew's: Mr. Paget.—A lad was admitted on account of most extensive rupture of the perineum, &c., consequent on an injury. Mr. Paget performed an operation for procuring union, but the opposed surfaces gave way, and but little benefit resulted.

AMUSSAT'S OPERATION FOR ARTIFICIAL ANUS.

Case 1.—University College: Mr. Erichsen.—A man, aged 45, was admitted on account of extensive ulcerated cancer of the lower bowel. The operation of opening the colon in the left loin was performed, in order to relieve the distressing pain from which he suffered. He was in miserably ill health. Death from incipient peritonitis followed the next day. At the autopsy, the kidneys were found extensively degenerate. (For details see *Medical Times and Gazette*, December 20, 1856, page 619.)

Case 2.—St. Thomas's: Mr. Solly.—A man, aged 49, the subject of malignant stricture of the rectum. The stricture had become quite impassable, and he suffered from all the symptoms of intestinal obstruction. The abdomen was distended and tympanitic; the vomiting was almost constant, and the matters ejected were stercoraceous in character. The indications for the operation were thus very clear, and all other means of relief had been exhausted. The colon was found distended and large, and was very easily opened. A profuse flow of feces followed, and the man was greatly relieved. He lived six weeks afterwards, the artificial anus continuing to afford him full relief. Death from the original disease at length resulted. The autopsy confirmed the diagnosis as to the malignant nature of the growth which had caused the obstruction.

PARACENTESIS THORACIS.

A lad, aged 15, is under Dr. Goolden's care in St. Thomas's Hospital, on account of empyema. About a month ago puncture of the chest was performed by Mr. Solly, and fourteen ounces of pus evacuated. Under treatment. A case of empyema, in which an open external fistula has been established, is under Mr. Lloyd's care in St. Bartholomew's, and a second under that of Mr. Hutchinson at the Metropolitan Free.

PUNCTURE OF THE BLADDER.

Case 1.—St. Thomas's: Mr. Solly.—An Irishman, aged 34, admitted on account of retention of urine, of forty-eight hours' duration, consequent on an old stricture. Extravasation into the scrotum and perineum had already taken place. Puncture of the bladder by the rectum was performed, and a large quantity of urine drawn off. On the third day free incisions were made into the scrotum, to allow of the escape of sloughs. He recovered from the operation, but several fistulae remaining, perineal section was subsequently performed, after which he sank.

Case 2.—Guy's: Mr. Cooper Forster.—A man, aged 82, the subject of stricture of two years' duration. He had been drinking, and was admitted suffering from inflammatory retention. Catheterism being impracticable after opium, the warm bath, etc., puncture by the rectum was performed after thirty-six hours' retention. The canula slipped out the next day. Recovered well.

Case 3.—Guy's: Mr. Birkett.—A man, aged 54, admitted on account of retention of urine, consequent on an injury to the perinæum. Retention had existed twelve hours, and as the sufferings were most severe, and catheterism impracticable, puncture of the bladder by the rectum was performed. The canula was removed on the sixth day. Recovered. The wound in the perinæum healed.

OPERATIONS FOR URETHRAL STRICTURE.

Case 1.—University College: Mr. Quain.—A man, aged 28, had a stricture resulting from an injury to the perinæum about three months before. Since the injury he had experienced much difficulty in micturition, but the difficulty had varied much from day to day. No instrument could be passed further than to a part about six inches and a half from the meatus. On the operating table, however, Mr. Quain succeeded in introducing a small grooved staff, upon which the stricture was freely divided from the perinæum. A No. 9 silver catheter was then passed, and retained for thirty-six hours. Three weeks after the operation he was discharged, the wound being quite healed, the urine passing freely, and a No. 8 catheter being easily admitted.

Case 2.—Guy's: Mr. Cock.—A man, aged 30, in good health, for five years the subject of an impassable and very intractable stricture (for details see *Medical Times and Gazette*, Dec. 20, 1856). Frequent extravasations had occurred. Mr. Cock opened the urethra behind the stricture, and passed a female catheter from the wound into the bladder. The stricture itself was not divided. Soon afterwards the stricture softened down, readily admitting instruments. It was now treated by dilatation, and subsequently admitted No. 8 easily. The perineal wound healed well.

Case 3.—Guy's: Mr. Cock.—A man in bad health, aged 45, admitted with a stricture of ten years' duration. The whole perinæum and the back part of the scrotum were consolidated into a mass of dense fibrous structure, the result of irritation consequent on frequent extravasations. A small grooved staff was passed, and the induration, together with the stricture, freely cut through upon it. A considerable quantity of pus escaped. A female catheter was passed by the wound and retained. As yet nearly all the urine flows by the wound, but the induration is greatly diminished, and the urethra is pervious to large instruments. The incisions involved the whole length of the urethra, from the root of the penis to the edge of the prostate. Doing well.

Case 4.—Guy's: Mr. Cock.—A boy, aged 13, in good health, admitted on account of stricture consequent on injury to the urethra five months before, from falling on a spiked piling. A perineal fistula had resulted, and just anterior to it the urethra was quite impervious. All the urine passed by the fistula, and he had complete incontinence. No catheter could be passed. Mr. Cock cut down on the perinæum, and opened the urethra above and below the stricture. A tract of fibrous tissue an inch long appeared to represent the obliterated portion of the canal. A female catheter was passed through the wound and retained (November 4). On November 7 a catheter was passed through the penis into the bladder. After that, flexible catheters were introduced from time to time. On December 20 he was discharged, the perineal fistula being soundly closed, the stream of good size, and the urethra pervious to large instruments.

Case 5.—University College: Mr. Marshall.—A man, aged 23, the subject of stricture of two years' duration. Dilatation was practised until No. 4 could be passed, and upon a staff of that size perineal section was performed on September 4. He was discharged well, the wound being soundly healed, and the urethra admitted No. 8 easily.

Case 6.—University College: Mr. Marshall.—A man, aged 22, the subject of stricture of ten years' duration. Retention had occurred several times. Perineal section was performed in the usual way on August 23. The wound healed well, and he left the Hospital able to pass a full stream of water, and the urethra admitting No. 9 easily.

Case 7.—Guy's: Mr. Cock.—A man, aged 55, in good

health, the subject of stricture for twenty years. He had been admitted in April on account of a stricture, at the time impermeable, and after about a month's treatment by dilatation he was discharged, able to pass fair-sized instruments. After returning to the country the stricture again contracted, and the Surgeon under whose care he came advising an operation, he came up to town with the wish to have perineal section performed. He was re-admitted on October 27. Mr. Cook represented to him that relief might again be obtained by the treatment before pursued, but he was decided in his wish to be "cured by an operation." Under these circumstances perineal section was performed in the usual way on December 2. All did well for more than a week, when vomiting and constipation set in, and continued, without intermission, to the time of death (December 17). The abdomen had become tense and tympanitic, and all the symptoms of intestinal obstruction had been present. The wound was quite healthy. No autopsy.

Case 8.—Guy's: Mr. Birkett.—A man, aged 30, admitted on account of stricture, consequent on a bruise of the perinæum from falling across a hard body. The stricture had existed a year. No abscesses had formed. Perineal section upon a No. 2 staff was performed. No catheter was retained, but instruments were introduced from time to time. The wound healed well, and at the time the man left the Hospital the urethra was quite free, and admitted No. 8.

Case 9.—King's College: Mr. Fergusson.—A man of middle age, in bad health, and for sixteen years the subject of stricture, consequent on a blow on the perinæum. Abscesses had formed, and burrowing in various directions had left several fistulae. Perineal section on a No. 3 grooved catheter was performed. No. 10 was afterwards introduced, and retained for two weeks. The wound and all the sinuses healed soundly, and he regained his health. The operation was performed on June 14, and he was discharged on August 1st.

Case 10.—King's College: Mr. Fergusson.—A man, aged 33, the subject of a tight stricture, about half an inch within the urethra. He had suffered from retention for several days, and was almost in a dying state. The urethra at its strictured portion was freely laid open, and the urine evacuated. He did well, and left the Hospital about six weeks afterwards. The operation was done on June 7, and he left on July 16.

Case 11.—St. Thomas's: Mr. Solly.—A man, aged 34, for whom puncture of the bladder, by the rectum, had been performed in July. Numerous fistulae remaining, and the stricture still being intractable, perineal section was performed on September 15. Severe constitutional disturbance followed, and he died on September 21.

Case 3 of last quarter's report, a man under Mr. Hutchinson's care in the Metropolitan Free, has ended in a good recovery. All the sinuses are healed, and he passes urine freely. Two cases, formerly operated on by Mr. Paget, have recently come under notice, and in both the cure is thus far (about eight months) permanent and most satisfactory.

HOSPITAL NOTES.

RADICAL CURE OF HERNIA.—The man on whom Mr. Coote performed Wutzer's operation (see *Medical Times and Gazette*, Vol. XXXIV. page 471), was seen last week. He was quite well, the hernia did not return upon coughing, and there was scarcely a scar to be seen on the skin. A fibrous band occupied the inguinal canal. The man was much pleased with the result, and had been examined by many "doctors," according to his statement.

BINIODIDE OF MERCURY IN CERTAIN FORMS OF EPILEPSY.—At St. George's Hospital Dr. Fuller frequently uses the biniodide of mercury, and speaks of the great success he has obtained from it. Two cases of epilepsy at present under his care at the Hospital may be quoted in exemplification. The one is that of a boy, 18 years of age, who came under Dr. Fuller's care about the middle of last November; the other, that of a man at 44, who was admitted a patient in the middle of December. The boy, a plumber by trade, had fractured his skull fifteen months before admission, and began to suffer from epilepsy seven months afterwards. The man, a labourer, fell from a height of thirty feet on to his head nine years ago; had been more or less deaf with the right ear ever since, and began to suffer from epilepsy three years ago. There had been no discharge from the ear, and no decided

headache. In both cases, Dr. Fuller attributed the fits to chronic thickening of the dura mater, or, possibly, deposit between it and the bone, the result of the injury. To the boy he gave the biniodide of mercury, and did not have recourse to any local treatment. To the man he also administered the biniodide; but in consequence of the increasing frequency of his attacks, and the gradually increasing deafness, made use at the same time of a seton in the neck. Since the first week of the administration of the remedies neither of these patients experienced the slightest return of the fits. The boy feels quite well, and the man's deafness has greatly decreased. Nevertheless, Dr. Fuller directed that they should continue the remedies for at least another month or six weeks, with the view of completing the removal of the thickening to which he believes the fits to be attributable. Dr. Fuller administers the medicine in a state of solution, and believes that to this circumstance is, in great measure, due the success which has attended its exhibition. The scarlet red biniodide usually employed in medicine is insoluble in water, and when administered in pills is on that account comparatively inert; whereas the biniodide, as given by Dr. Fuller, is perfectly soluble, forms a colourless solution, is readily absorbed, and speedily produces its specific effects. The solution is formed extemporarily by the addition of from five to ten grains of iodide of potassium to 3j. or 3ij. of the liquor hydrargyri bichloridi. In cases such as those above alluded to, Dr. Fuller gives it uncombined with other remedies; whilst in cachectic rheumatism, accompanied by periosteal swelling, he usually combines it with bark and sarsaparilla. In his work on "Rheumatism, Rheumatic Gout, and Sciatica," 2nd ed., p. 413, he says:—The biniodide of mercury kept in solution by an excess of iodide of potassium has proved in my hands the most valuable of all medicines in rheumatism which has supervened in a system tainted by the syphilitic poison, and in several instances has effected a cure after the bichloride had been given in vain." About a month ago we directed attention to its successful employment by Dr. Fuller in cases of deafness supervening on rheumatism, consequent, as he supposed, on some thickening and rigidity about the structures connected with the organ of hearing. He speaks so highly of the good effect of the remedy in so many cases attended by thickening or by periosteal swelling, that he confidently recommends a trial of it in appropriate cases.

PIECE OF WOOD DRIVEN INTO THE SUPERIOR MAXILLA, AND REMAINING IMBEDDED FOR TWO MONTHS.—Michael Sullivan, aged 16, applied at the out-patient room of the Westminster Hospital on the above date for stillicidium of the left eye, which had existed a month. The lachrymal sac was distended, but could be completely emptied through the two punctæ. The skin over the sac was natural in colour, and pressure on it caused no pain. A small linear cicatrix, parallel with the border of the lower eyelid, and about an inch below it was observed, and between this cicatrix and the margin of the orbit, a small, hard, irregular lump was felt, resembling an exostosis, pressure on which caused slight pain. The lad stated that about a month before, while engaged on some scaffolding, he heard a noise above him as if something had given way, and on looking up he was immediately struck on the face by the point of a falling paint-brush, which, on being picked up from the ground was observed to have the end of its handle broken off. The accident occurred at nine a.m., and he came at once to the Hospital. The surgery man saw him, and observed to him that it was merely a slight scratch he had got on the cheek, put a piece of plaster over the wound, and sent him away. Some inflammation afterwards took place in the eyelids, and he became an out-patient of Mr. Hillman's, under whose treatment the inflammation subsided, and the small wound in the cheek healed. About three weeks after this the boy again became an out-patient, and this time under Mr. Holthouse, to whom he applied for relief for the watering of the eye, when the above history was obtained. Mr. Holthouse explained to the pupils that the tumour felt in the cheek might be a portion of the handle of the paint-brush, or it might be bony matter thrown out in consequence of the injury; the inflammation that was set up in the neighbourhood of the wound, and which affected the eye, he thought might have extended to the nasal duct, and so caused temporary obstruction of that canal. Mr. Holthouse therefore decided on treating it at first as if caused in the latter way, and explained that if, after a reasonable time, no alteration should take place in the symptoms, he should cut down upon the

tumour and search for the missing part of the paint-brush. The treatment consisted in directing the lad to empty the sac several times a day, and afterwards to have dropped into the eye a solution of sulphate of zinc (gr. ij. to 3j.); the boy was also directed to take a mixture composed of iodide of potassium, gr. iij., camphor mixture, 3j., three times a day. This treatment was persevered in from the 5th of May to the 5th of June, when no improvement having taken place, Mr. Holthouse made an incision over the tumour parallel with the fibres of the orbicularis muscle, one inch in length, and half an inch above the cicatrix, which it should have been mentioned was situated at this distance below the tumour. After cutting through the orbicularis, and some tough, fibrous tissue, a rough, irregular body was felt at the bottom of the wound; and, after some effort, the forceps grasped a portion of the projecting substance, which gave way on traction, and proved to be a small piece of wood. A stronger pair of forceps having been procured, and very gradual traction made, the accompanying piece of wood was drawn out. A probe could be passed without obstruction in a direction backwards and slightly inwards, till it struck against the posterior wall of the pharynx, at its upper part, exactly three inches and three-eighths from the external orifice of the wound. The wound in the integuments was brought together by a single suture and two or three narrow slips of plaster, and after the patient had recovered from a slight faintness he was sent home. On the following day (June 6th) the boy complained of a little headache, and there was some œdema of the eyelids, with slight conjunctivitis. June 18th.—Although the wound has healed for several days, some conjunctivitis, with œdema of the lids, still remains, and a small abscess has formed on the edge of the upper lid. This was punctured, and a lotion ordered to the eye. June 20th.—The inflammation has nearly subsided, but some obstruction still exists in the canal. July 6th.—The obstruction still continues, although all inflammation has disappeared. The zinc lotion was ordered to be used to the eye, and on the 20th the obstruction had entirely disappeared, and the lad was discharged cured. The mode in which this accident occurred explains why the cicatrix on the cheek did not correspond with the situation of the tumour. At the moment the boy was struck by the paint-brush, his face was turned upwards, and the head bent much backwards, so that, on being struck, a portion of the skin was pierced towards the eyelid; and after the wood had become imbedded in the bone the weight of the brush broke the handle short off on a level with the bone, and the skin returned to its place, presenting a mere linear wound some lines below the opening in the bone.

EXPECTED OPERATIONS.—At St. Bartholomew's, on Saturday (this day), Mr. Stanley has a case in which amputation of the thigh is to be performed. At King's College Mr. Ferguson has three cases of Plastic Operations; and Mr. Bowman a case in which a pendulous tumour from the thigh is to be removed. At St. Thomas's, Mr. Le Gros Clarke has a lithotomy (uncertain.)

NOTES AND QUERIES.

We that questioneth much shall learn much.—Bacon.

No. 189.—CANCER CURING.

In your Journal of last week you advert to the method adopted by Professor Simpson to enucleate tumours; viz., by puncturing them, and injecting into these punctures solutions of caustic. Now, I do not think it would be unworthy of trial by surgeons, to see what would be the effect of carrying out this method on a larger and more perfect scale. Thus; remove the epidermis over the tumour by a blister or otherwise; cover the denuded surface with a layer of the sulphate (or chloride) of zinc paste, and at the same time (or after the lapse of a day or so,) score the tumour deeply by incisions with a bistoury, filling these incisions with the sulphate (or chloride) of zinc paste. It appears to me the inevitable consequence would be, that the tumour would slough out as a whole—would "enucleate" itself.

I am, &c.

CHIRURGICUS.

No. 190.—THE CLIMATE AND DISEASES OF IRELAND.

In your Number for January 17 (p. 77), you give an extract from "an interesting manuscript, written in 1690, on the Climate and Diseases of Ireland, by Dr. Willoughby, and brought before the Royal Irish Academy by Mr. Wilde." Probably it was unknown both to you and to Mr. Wilde that this extract has already appeared in print, and is to be found (with only two or three very slight verbal variations,) in the *Provincial Medical and Surgical Journal* for 1846, page 139. Here it forms part of some "Extracts from Dr. Willoughby's Papers," copied from a MS. in the Bodleian Library at Oxford, written "about the beginning of the last century." (1845, page 618.) It is not stated in your Journal where Mr. Wilde's MS. is to be found, but the above extracts agree so nearly with the description of what he communicated to the Royal Irish Academy, that it seems probable he has met with the original MS. from which that in the Bodleian Library was copied. As the matter is not without interest, perhaps Mr. Wilde (if this letter should fall into his hands) will kindly give your readers a slight account of his MS., and also state whether it corresponds with the extracts published ten years ago in the *Provincial Medical and Surgical Journal*.

I am, &c.

M.D.

No. 191.—ASSURED CENTENARIANS.

According to a recent communication of Dr. Webster, in the *Athenæum*, the most aged persons on whom an insurance policy had been paid, by twelve of the oldest and largest offices in London, were as follows:—At the Amicable, the party died aged 97; the Pelican, 97; Royal Exchange, 96; Equitable, 95; Albion, 95; Rock, 94; Imperial, 94; Union, 94; Atlas, 92; Law, 92; Sun, 92; and London, 90; while at several of these companies various persons, whose lives are insured and still live, have attained equally advanced ages, although none have yet actually become centenarians. There is a government annuitant now alive in Scotland, aged 103. These facts, being curious and interesting, merit consideration.

ANSWERS.

No. 188.—TOBACCO QUERIES.

SIR,—In reply to "An Inquisitive M.D.," who asks, in your Number of to-day, from what statistics has Dr. Webster been enabled to state that "Cretinism is invariably present in post-mortem examinations of inveterate smokers?" I would beg to say, having never expressed such an opinion, that I can recollect, as the one now attributed to me, I am consequently unable to give any information respecting the point he desires. Indeed, being altogether unaware, till now, that an allusion had been made to my name in connexion with the tobacco controversy, I could not deny the specified remark said to be mine, but which, doubtless, was made by some other person. Nevertheless, if it were in my power, I should have willingly referred your correspondent to the source from whence statistical evidence could be obtained in support of the dictum enunciated, or give a *quid pro quo*, speaking figuratively.

I am, &c.

JOHN WEBSTER.

21, Brook-street, February 7, 1857.

No. 170.—LOCK HOSPITALS.

With regard to the query about the derivation of the term "lock," as applied to hospitals for venereal disease, I beg to observe:—In the "Dictionarium Somneri Saxonico-Latino-Anglicum," Oxon, 1659, the words "loc" and "loce" occur with the meanings, *claustrum*, *clausura*, and an inclosure, etc. appended. Again, in "Phillips' Dictionary," by Kersey, London, 1716, the word "lock" is given with this interpretation among others:—"The name of an hospital in Southwark, for persons under cure for the venereal disease." As venereal disorders were in those days believed to be equally contagious with leprosy, hospitals for their reception were by law prevented from being established in the Metropolis. Perhaps, loc, loce, and the modern lock are merely varieties of the same derivative from the Latin *locus*. However this may be, it is plain that the term "lock," as at present applied to certain hospitals, has been by usage transmitted from times when the term had a real significance.

I am, &c.

London, February 5, 1857.

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Medical Times & Gazette.

SATURDAY, FEBRUARY 14.

THE NEW PUBLIC HEALTH BILL.

THE truth of the remark we made last week as to the appointment of Mr. Monsell to the Presidency of the Board of Health has been very generally acknowledged; and it is to be hoped that when the proposal comes on in the House of Commons to continue the Board of Health for another five years, strenuous opposition will be made to any "Public Health Bill" which does not provide for a thorough reform in the constitution of the Board. After the repeated mistakes of the old Board, and the no less repeated exposures of the Press, a certain amount of improvement has taken place. The President is a responsible representative in Parliament, and a permanent Medical adviser has become an essential part of the Board; but not one of the three superintending Inspectors is a Medical man. The President, Secretary, Assistant-Secretary, and the three Superintending Inspectors, are all laymen. There is but one Medical vote in a Board constituted for the superintendence of all matters affecting the health of the nation. Such absurdity cannot be permitted to continue. The public will have no confidence in the Board till its President is a man of distinguished position in the Medical Profession, deserving and enjoying the confidence of his Professional brethren. The placing an Ordnance clerk at the head of the sanitary machinery of the State is part and parcel of that class-legislation which makes the Duke of Argyll Postmaster-General, while Rowland Hill does the work; or Major Graham Registrar-General, to take the reward, if not the credit, for Dr. Farr's labours. We do not want an ornamental chief at the Board of Health; we must have a President who knows what his important duties are and how to do them. It is an insult to the Medical Profession to make a man principally known for his egregious blunders with the Ordnance Estimates the Minister of Health of Great Britain. It is positively injurious to the public to appoint mere engineers to be sanitary inspectors. Engineers are very necessary persons to consult upon the works necessary for town-drainage, water-supply, etc.; but they are not the men to investigate the origin and progress of endemic or epidemic disease, or the causes affecting the public health either of a district or of the whole country. For this purpose a trained and efficient staff of superintending Medical Inspectors should have a seat at the Board of Health, and be in correspondence with local District Inspectors. The public health requires administrative and executive vigour and ability, both at the General Board and at Local Boards.

The present Board of Health only exists until the end of the present session of Parliament. Upon the question of its continuance the whole subject of State Medicine will probably be discussed in the House of Commons. If it be continued,

do not let us have a mere perpetuation of the present sham Board; let us have a reality, not a counterfeit—a Board with real power, and so constituted that it may be trusted to use its power. Our readers may do good service by impressing these views upon those of their friends who are in Parliament before the "Public Health Bill" is brought under discussion in the House of Commons.

THE WEEK.

CANCER Caustics are the order of the day. Go where we will, chloride of zinc, sulphate of zinc, the chlorides of antimony and iron, and their action on cancer, are the subjects of conversation. Dr. Simpson's caustic and a weak solution of chloride of zinc are being tried extensively both in public and private. Mr. Moullin has used the chloride of zinc in a less dilute form, and brought before the Medical Society last Saturday two tumours of the breast he had so removed, the one of 8 years', the other of 20 years' standing. Both cases were patients of the Westbourne Dispensary. The chloride of zinc was applied after the integuments covering the entire tumour had been destroyed by the application of nitric acid. It was used in the form of a thin paste, made of equal parts of the chloride and thick mucilage, and spread upon linen. It was applied over the whole raw surface, and covered with cotton, which was allowed to remain till next day. The dressing then being removed, incisions were made to the depth of the destroyed part (about one-eighth of an inch) and one-third of an inch apart from each other. These caused no pain. The chloride of zinc paste, now spread upon strips of linen, was inserted in each incision, and covered over with cotton. One hour after the dressing the patient began to feel a sensation of heat in the part, which lasted for three or four hours, not at any time amounting to pain. She slept well. Next day the same process was repeated, and continued for fifteen successive mornings, when the whole tumour was destroyed. Separation now commenced, and on the thirty-third from the first application, the tumour fell out, leaving a perfectly healthy surface, which gradually healed, and is now quite sound. The history of the other case is much the same, except that in the second there was a large fungous growth on the upper part of the breast, which was also completely destroyed, after fourteen dressings, and enucleated in forty days, having the same healthy appearance as the former, and progressing equally well. Mr. Moullin stated that Mr. Haviland had assisted him in these cases. The results of this treatment are very similar to those obtained by Dr. Fell, and the scoring of the slough is a practice very probably in imitation of the American Doctor. The tumours are doubtless removed, and the resulting cicatrix is firm, but whether the patient is in so good or a better condition than if the tumour had been removed by the knife is quite another question.

Our contemporary, *Mr. Punch*, with his usual wit, took off not long ago in admirable caricature the mania for allowing boys, just emerged from their cradles, to dispense medicines for the sick. An old lady applying at a chemist's shop is accosted by a child, whose tiny hands are required to raise his head above the counter, with "Mr. Pottle's out of town, mum, can I give you any advice?" This is the ludicrous aspect of the baby-dispensing business; its counterpart would be the applicant paying the penalty—the bottle which had contained the juvenile physic grasped in her hand—a poisoned victim! The case which has lately occurred at Brompton, and which has terminated in the acquittal of the prisoner, is one surely which will operate with some effect in checking a practice which is so outrageous to common sense as to be even ludicrous in spite of all its dangers. Boy poets are bad

enough, though tolerable, but boy dispensers are entirely removed from reason. If boys may dispense prussic acid, laudanum, arsenic, and nux vomica, why may they not drive railway engines and manufacture gunpowder? What is to be done? Shall Parliament pass a little bill against little boys? Shall the Pharmaceutical Society issue a bull to its members, boring them with an appeal to their honesty and proper care for the lives of their customers? Not much use these measures, we opine. The remedy is in the hands of the customers themselves. Those who frequent the shop of the dispensing druggist should keep a sharp look-out as to who serves; and, if they see a boy serving, the common sense rule is, Go there no more. When Mr. Tomkins goes to Mr. Cracker's with a prescription from his doctor, or the family recipe from his mother, let him look at the person who makes it up, and then privately ask himself whether he would like to sit in an express to Brighton with a person of the same age and cast managing the steam. If he would not, then he had better not let such an one dose him with drugs. We recommend, further, the professional prescriber to take his share in stopping this absurd iniquity. It is his duty to let no patient leave the consulting room without warning him not to obtain medicines from any boy-dispensing factories. In the Brompton case, it is true, that the blame did not rest so much with the prisoner as was at first sight supposed; and the jury had no alternative but to do as they did, viz., acquit him, and give a reprimand to those who employ boys for such important duties. It seemed from the evidence, indeed, that the fatal mistake arose from the accidental mixture of a poisonous drug with a simple one. But it is to prevent such an accidental admixture that experienced men are required, since such mistakes are the children of childishness as much as the substitution of oxalic acid for salts, or tartar emetic for James's powder. We regret, moreover, to say that the practice of boy-dispensing is not confined to the small druggist's shop. In some of our public dispensaries the same grievance prevails; and we know physicians who are afraid to prescribe important remedies because they are uneasy about the mode in which their directions will be carried out. In a word, the prevailing notion seems to be, that anybody, young or old, gentle or simple, learned or ignorant—that a boy who absolutely cannot be taught to twist a thread or wrap up a pound of tea—can at any rate perform duties upon the accuracy of which health and life depend. A comfortable reflection this for the doctors—a nice piece of scandal for those who laugh at physic, and include the doctors themselves in their derision!

Several weeks ago we suggested that Mr. Andrews's excellent portrait of Mr. Newnham might be presented to the worthy supporter of the Medical Benevolent Fund on his retirement from the active duties of his Profession. We are now happy to state, that a Committee of members of the Medical Benevolent Fund has been formed for the purpose of paying a well-merited compliment to their most excellent and indefatigable Treasurer, Mr. Newnham, who has been for so many years the animating and guiding spirit of that admirable charity. It is proposed to purchase immediately, and present to Mrs. Newnham, the capital portrait of Mr. Newnham, by Mr. James Andrews, which was exhibited last summer in the rooms of the Royal Academy. In order that the compliment to Mr. Newnham may be spread widely among his friends and admirers, it has been determined that no subscription shall exceed one guinea. The following are the members of the Testimonial Committee:—Sir James Clark, Bart., President; Dr. James Bright, Secretary; Joseph Toynbee, Esq., Assistant-Treasurer of the Benevolent Medical

Fund; Sir Charles Hastings; Sir John Forbes; John Churchill, Esq., Members of the Managing Committee. Sir John Forbes has consented to act as Secretary and Treasurer of the Testimonial Committee, and it is requested that all subscriptions and inquiries be addressed to him at 12, Oldt Burlington-street, London.

A paper was read at the last meeting of the Medical Society of London by Mr. Ross, on a very important subject. Being the public vaccinator of a large district, his experience has led him to believe "that vaccinia, under certain circumstances, is followed by a secondary eruption, special in its nature though various in forms, which observes fixed periods of evolution, and is an integral part of the original affection." He thinks the eruption would be much more frequently observed if children were watched after the eighth day. It prevails principally in the summer months. Mr. Ross agrees, therefore, with the popular belief that cutaneous affections follow vaccination; but argues that, so far from exciting prejudice against vaccination, these secondary affections should be looked upon as evidences of the complete impregnation of the system, and of the protective efficacy of the operation. The subject is one which certainly merits fuller investigation. Mr. Marson, who has been twenty years surgeon to the Small-pox Hospital, has also alluded to another very important question. He says in a letter published in the *Times* on Thursday: "Small-pox requires 14 days for its development—that is to say, 14 days after the disease is taken it appears on the skin, and there is usually 12 days' freedom from illness. The vaccine vesicle requires but seven days for its development to be in perfection to vaccinate from, so that if a child be vaccinated two or three days after it has taken small-pox, it may have good vaccine vesicles formed, fit to vaccinate from before the small-pox appears, and yet not be in the least protected by the vaccination. The vaccination requires a further stage—the stage of areola—before any protection is afforded. Unless there has been time for the vaccination to run its course to the stage of areola, without illness from small-pox, the small-pox will be just as severe as if the person had never been vaccinated." This must be borne in mind when the protective power of vaccination is called into question.

A printed document, entitled "Suggestions for the Improvements required in the Pay and Status of Officers of the Army Medical Department," has been sent to us, and we understand that a copy has been forwarded to all the leading men in office, and in both Houses of Parliament. We have not space to consider the document at length this week, and it is scarcely necessary to do so, as it will doubtless be brought before the Commission which is to examine the subject. But we may say that on the whole the requirements appear to be exceedingly moderate and reasonable.

Among the more important of the specimens shown at the Pathological on Tuesday evening, was that by Mr. Bryant, of union by bone after fracture of the neck of the thigh-bone. Considering that the treatment of this case had been conducted under difficult circumstances, the patient being an imbecile lunatic, the result is the more extraordinary. After death it was proposed, as a matter of curiosity, to take out the head of the femur, it being recollected that a fracture had occurred five years ago. The side of the fracture had, however, been forgotten; and so perfect had been the motion produced, that after examination by rotation, etc., the wrong side was selected, and the uninjured bone first removed. We suspect that, were all cases carefully examined, union of this

class of fractures would prove to be not quite so infrequent an event as it is supposed. It follows naturally that more examinations are made in the cases which have not united than in others, since the fact of the patient remaining lame keeps the injury in remembrance; and as many years often elapse between the accident and death, not unfrequently the Surgeon who makes the autopsy is not the same who attended to the injury. From this circumstance cases of good union are more likely to be overlooked than others. At any rate Mr. Bryant's case adds another to the list of those proving bony union of an intra-capsular fracture in an old person to be possible; and there can be no doubt that, circumstances permitting, it is the Surgeon's duty to treat all cases in the way most likely to conduce to that end.

PRIZES AT THE ACADEMIE DES SCIENCES.—The Academy has decreed its Cuvier prize to Prof. Owen, for his *Researches in Anatomy and Physiology*. The prize for Experimental Physiology of 2000 francs has been decreed to Dr. Waller, an Englishman settled at Bonn, for his *researches on the Spinal Ganglia*. For his discovery of the application of amorphous phosphorus to the manufacture of lucifer matches, the Academy has awarded a prize of 2500 francs to M. Schrotter. In the department of medicine and surgery, the Montyon prizes of 2000 francs each have been awarded to Dr. Simpson for the introduction of Chloroform into surgical and obstetrical practice; to M. Malgaigné for his work on fractures and dislocations; to M. Jules Guérin, for having generalized the subcutaneous method; and to M. Stilling for his microscopical researches upon the spinal cord. Numerous other rewards of 1000 francs have been adjudged, and amongst others to M. Middeldorff for the employment of the electrical current as a means of cauterisation; to M. Brown-Séquard for his observations upon the results of lesions of the spinal marrow; to M. Boinet for his researches on iodine injections in disease of the ovary; to M. Guillon for his mode of dilating strictures of the urethra; to M. Faux, for his researches on asphyxia; and to M. Philippaux, on his new views on the action of caustics. The grand prize proposed by the Academy for Physical Sciences, for 1847, and postponed in 1849 and 1853, and 1856, having for its subject the development of the embryo, has now been decreed to M. Lereboullet, of Strasburg; and another grand prize—subject, the distribution of organic fossils in the tertiary strata—has been decreed to M. Brown, of Heidelberg.

The next Alhumbert prize of a gold medal, 2500 francs in value, will be for the following subject, "The fecundation of the ova, and the structure of the organs of generation in the principal natural groups of the class of Polypi, or of that of the *Acalephæ*."

The *Breant Legacy* of 100,000 francs has been left for the foundation of a prize, to be decreed to whoever discovers the causes or the means of cure of the cholera. Until the prize is adjudged the interest of the capital is to be given to whoever may be deemed to have advanced our knowledge respecting cholera or other epidemic disease, or to any one who will point out the means of radically curing *dartres*.

MONUMENT TO GEOFFREY ST. HILAIRE.—The design of raising a statue to this great naturalist, at his native town of Etampes, is at last to be realized, the commission having been entrusted to M. Robert, a pupil of David of Angers. As the funds, however, are still deficient, the Committee renews its appeal for contributions from the lovers of science, not only in France, but throughout entire Europe. Communications may be addressed to M. Reynier, Secretary of the Faculté des Sciences, Paris, or to M. Venard, Trésorier de la Commission, Etampes.

ROYAL DISPENSARY FOR DISEASES OF THE EAR.—The half-yearly meeting of this useful institution was held on Thursday last at the Dispensary, Dean-street, Soho. The Secretary announced that the Dispensary had afforded treatment to an increased number of applicants during the last half-year. The statistical account of the new admissions was 1058 cured, 174 consisting of discharges from the ear, nine in the head and ear, nervous affections of the head, rheumatic deafness, diseases of the throat, with some aggravated forms of polypus in the ear, and other diseases of a kindred nature.

OUR GREAT ONES OF THE PAST.

RICHARD MEAD, M.D., F.R.S.—Continued from page 122.

WE left Mead in Austin Friars in the year 1711, busy doubtless in arranging his new house, and in preparing his course for Surgeon's Hall. He had plenty on his hands now,—hospital visits, lectures, a new house, several children, an increasing practice, an extensive circle of friends to socialize among, and the MS. of a new inquiry on his study table for filling up leisure chinks. A very busy time this in any man's life, yet a happy time too, the only happy time, if the man himself be by nature industrious, anxious, earnest, restless,—like all men upon whom is placed the press-mark "First men." To such, starvation of mind is a more serious penalty than starvation of body; they must do or die.

Hogarth, whose work will be seen in the above sketch, has been at his wicked caricaturing again, and has made poor Mead take the dignified position of militia drill-sergeant. Mr. Squibb is once more to be thanked for the representation.

The author of an amusing book called the "Gold-headed Cane" tells us with great unction about the illness of Queen Anne, and about Mead being called in to consult with Arbuthnott and his colleagues. We cannot accept all that this imaginative writer says, but it seems from other testimony that Mead's presentiment of danger was keen, and that, at his instigation, an account of Her Majesty's dangerous symptoms was sent to Hanover, as preparing the way for the departure of the first George for the kingship of England. This statement must not be received, however, as telling against Arbuthnott, to whom, notwithstanding the high intelligence of Mead, the fair critic must award the first position as a man of intellect and genius. It is sufficient to know, that no variance of a personal kind ever existed between the two; they knew, understood, and respected each other, though Arbuthnott lost place, and Mead took up his court garment of favour. Radcliffe, it would seem, was first summoned to the consultation, but was ill with gout at Carshalton, and could not attend. Within three months after this event, viz. on November 1, 1714, Radcliffe himself shuffled off existence; and Mead, who had succeeded already to much of his practice, (a) now succeeded also to his house in Bloomsbury-square.

The distance of this house from St. Thomas' Hospital caused Mead to give up his appointment as physician to that institution, on January 5th, 1716.

The Committee returned their thanks, and honoured him with a governor's staff. On March 17th, of this same year, Bishop Burnet died. Mead, Cheyne, and Sir Hans Sloane met

in consultation in this case. About this time Mead was engaged in an inquiry as to the value of purgatives in the treatment of small-pox, as preventive of the seven-day fever. He

(a) Radcliffe was elected M.P. for Buckingham in 1713, and at that time, virtually, had resigned practice.



seems to have thought he had made a valuable point in this treatment, but he did not publish any distinct work on the subject until many years afterwards. Meantime, however, he had communicated his ideas to Friend and Radcliffe, and in 1717 Friend, in a commentary on the first and third books of Hippocrates, published a letter on the above-named treatment, which he had received from Mead seven years before. Hereupon Dr. Woodward, whom we have met already in these memoirs, published a book in opposition, called "The State of Physic and Diseases, with an inquiry into the causes of the late increase of them, but more particularly of the Small-pox." A literary battle followed and much ill-feeling. Mead did not forgive nor forget.

In 1717 Sir Isaac Newton gave to Mead the office of Vice-President of the Royal Society. Two years later Mrs. Mead died, leaving four only out of eight children, three daughters and one son, Richard by name. In the same year the then Secretary of State, Mr. Craggs, gave to Mead a commission to make an inquiry into the best mode of stopping the pro-

gress of Plague, which disease was at that time prevalent at Marseilles. The result was the publication by our author of his famous treatise, "*A short Discourse on Pestilential Contagion, and the Methods to be used to prevent it.*" The discourse was dedicated to Mr. Secretary Craggs, with the usual honours. It went through eight editions in three years, and although it did Mead honour as a medical work, it was said to be injurious to him socially, since it was thought to have a political meaning, and that in the recommendations so strongly urged by him for a strict quarantine, and for lazaretto lines of circumvallation, an intention was supplied for the erection of barracks and the support of a standing army at home. In time the fallacy of this popular rumour died away, and the honesty of the man was as fully recognised as before. The work on the Plague went through seven editions in one year, its author presenting copies of it only to his more particular friends. By the courtesy of Dr. Webb, of Great Coram-street, we have been favoured with the loan of one of these handsomely bound presentation copies. It was sent to the "noble Lady Pembroke," and bears on its first page, or rather fly-sheet, a compliment in the handwriting of Mead, the last two lines of

which we append with the autograph.

In this work Mead expressed himself strongly in favour of the contagion theory, and having announced this dogma, his preservative measures were based upon

it. Quarantine long—Quarantine strong—was the burthen of his argument. As to a specific remedy for the Plague, he opines that this is no more to be hoped for than is a specific preservative for the small-pox. But in this remark coming events certainly did not cast their shadows before, for ere yet Mead had

From her most obedient
(and most humble servant
R. Mead.

gone to his grave in the Temple, a boy was beginning to lisp to his mother, in first attempts at English, who was to supply the small-pox preservative, remove in great part a plague-spot from this earth, and immortalize his age, his country, and himself. Edward Jenner was born between four and five years before the death of Mead.

We have omitted to mention, that on the 9th of April, 1716, Mead was admitted as a Fellow of the Royal College of Physicians, and acted as Censor until 1724. In 1717 he was elected (October 6) Fellow of the Royal College of Physicians of Edinburgh. In 1721 (at the command of the Prince of Wales) he made the famous experiment of inoculating some condemned criminals for the small-pox. On six of the prisoners he tried the ordinary method, on the seventh he carried out the Chinese plan, slightly modified; by introducing into the nostrils a pledget wetted with matter taken from a ripe pustule. This succeeded. All the criminals contracted small-pox, except one, who had had the disease previously. They all too recovered and saved their lives; going out of prison even safer than when they went in. The success attendant on this trial being thus eminently successful, the two young princesses, Amelia and Caroline, were inoculated on April 17, 1722. Both had the disease favourably; and thus the practice, first introduced into this country by Lady Mary Wortley Montague, became universal.

The notorious "Atterbury plot," as it has been called, occurred in 1722, and Friend, whose valour overcame his discretion, being then M.P. for Launceston, made himself so conspicuously opposed to the Government, that he was cast into prison on suspicion of being connected in the plot; and was there confined for many months. Mead took, meantime, the greater part of his practice, and used his best efforts for the liberation of his friend. He was allowed to visit the prisoner, and "Gold-headed Cane" dwells on one of these interviews, in which they discovered Friend writing a letter to his visitor. Friend stated that his time did not pass unpleasantly, as he was busy writing his *History of Physic*. "Gold-headed Cane" further tells us, that Mead secured the liberation of Friend, as follows:—

"When Sir Robert Walpole, the minister of the day, sent to consult Mead on account of an indisposition, he availed himself of the occasion to plead the cause of the captive. He urged that though the warmth and freedom of Friend might have betrayed him into some intemperate observations, yet no one could doubt his patriotic feelings and loyalty. Finally, the Doctor refused to prescribe for the minister, unless the prisoner was set at liberty. He was almost immediately relieved from prison and admitted to bail, his sureties being Dr. Mead, Dr. Hulse, Dr. Levet, and Dr. Hale." The evening after this event, continues the "Cane," there was a numerous assembly at our house at Great Ormond-street, attracted by the hope of seeing Friend. He came, and every one was delighted to meet him once more. When the party broke up, Friend and Arbuthnott were about to take their leave together, as they lived in the same part of the town—the former in Albemarle-street, the latter in Cork-street. Dr. Mead, however, begged Friend to step with him into his own private study, which was a small room adjoining the library. There he presented him with the sum of five thousand guineas, which he had received from his patients whom he had visited during his confinement. On returning to the great room, he wished them both "Good night," and jocosely said to Arbuthnott (who happened to hold the office of Censor to the College that year), "Now I commit our common friend here to your magisterial care and guidance; see that he does not again get into trouble; and on the least appearance of irregularity report him to the President, Sir Hans Sloane. I look to you, Arbuthnott, to preserve harmony amongst us."

In 1723, (October 18th,) it fell to the lot of Mead to deliver the Harveian Oration at the College of Physicians. This oration was severely criticised by Dr. Middleton, the point in dispute being, whether the Physicians of old Rome were or were not slaves? Mead said, No; Middleton said, Yes. Argument ran high, when Professor Ward came in to the rescue of Mead, and gave the victory to him. It is creditable to Middleton that, despite this learned fight, he retained his high and unabated regards for his antagonist. The subject of the fight itself is best given by our *Britannique* friend; it was on a "question of little importance to know, and of much difficulty to decide."

The curtain rising after another year, discovers Mead a

second time taking to himself a wife. On August 14th, 1724, he married Anne, daughter of Sir Rowland Alston, of Odell, Baronet. Mrs. Mead, No. 2, outlived her husband, but had no children.

The "Gold-headed Cane" tells with minuteness the history of the last illness of the great Sir Isaac Newton:—"In 1726, early in the month of March, Mr. Conduit called upon my master, and carried him, together with Mr. Cheselden, to Kensington, where Sir Isaac had taken a house for the benefit of his health. On our first interview, it was pronounced that the illness of Sir Isaac arose from stone in the bladder, and no hopes were given of his recovery. We found him suffering great pain; but, though the drops of sweat ran down from his face with anguish, he never complained or cried out, or showed the least signs of peevishness or impatience. On Saturday, the 10th of March, he read the newspapers, and held a pretty long discourse with Dr. Mead, and had all his senses perfect. But at six o'clock on that evening he became insensible, remained so during the whole of Sunday, and died on Monday, the 20th, between one and two o'clock in the morning."

In 1727, on the accession of the second George, Mead was appointed First Physician to His Majesty. His success at this time was without parallel. He was consulted by all persons of consequence, and his doors were constantly thronged with the poor, to whom he not only gave his advice free of cost, but commonly added to it pecuniary assistance. His house was one great museum and treasury of learning and science. For a foreigner to come to London and not visit Mead was to omit one of the lion treats. He was accessible and courteous to every one. If an artist or writer, or ingenious man of any sort, was needy and in need, Mead was his refuge. A marble bust of Harvey, which he presented to the College of Physicians, from an original picture, was done by an artist under his patronage. He studied how to make remunerative work for the employment of others, and the study was to him a delight. If any benevolent man, with money in hand, wanted to expend it in charity, Mead pushed the matter home, and pointed the way. If an invention or experiment had to be tried, Mead must, of course, be invited to see it. If a valuable book, piece of art, or ought else of scientific, learned, or antiquarian lore, were brought to London, the chances were ten to one that Mead's museum or library would become the storehouse. His time was incessantly occupied; but the variety of occupation, and the simplicity of his habits, rendered his labours a pleasure and his life a constant enjoyment. "With respect to his manner of living," says the Gold-headed Chronicle, "when not engaged at home, he generally spent his evenings at Boston's coffee-house; and in the forenoons apothecaries used to come to him at Toni's, near Covent Garden, with written or verbal reports of cases, for which he prescribed without seeing the patient, and took half-guinea fees."

The history of Thuanus was brought out in full in this country through the liberal exertions of Dr. Mead. A Mr. Carte, who had been accused of high treason, and who had fled to Paris for safety, employed his time in collecting materials for an English translation of Thuanus. Mead hearing of this enlarged the design, and, having paid Carte for what he had already done, appointed Mr. Buckley to edit the work. Thus, under Mead's patronage, a perfect edition of the work was brought out, including three letters from Buckley to the Doctor explaining the character of the history, and the plan of the new edition. These letters were done into Latin by Professor Ward, and were placed in the front of the work, which was published in 1733 in seven folio volumes. In like manner he printed for private circulation Dr. Thomas Burnet's "De Statu Mortuorum et Resurgentium."

We pass over a long series of years, during which we can follow the daily course of Dr. Mead imaginatively only, except to record that in 1735 he wrote a paper, not to the conviction of Boerhaave, recommending the use of a mixture of the Lichen Cinereus Terrestris and Pepper as a specific for hydrophobia, under the name of Pulvis Antilyssus; and that in the following year he, as joint executor with Lord Chief Justice Reeves of the will of Thomas Topham, Esq., bestowed on Eton College that gentleman's books and drawings. We may be assured that at this time he was not idle, for his librarian, Mr. Hocker, tells the *Britannique* biographer, that in one year his master made £7000, and for several years between £5000 and £6000. He was, however, too liberal to hoard up his fortunes. His table was

at all times surrounded by friends and acquaintances, and he even had a second table, to which persons of an inferior position were welcome. Nor did he make all that he might have done by his practice, for of men of learning he would never take a fee. Bowyer, the printer and scholar, always, he tells us, consulted Mead, but was never allowed to pay for the advice. The same beneficence was extended to the clergy, from whom he was never known to accept money but on one occasion. The anecdote is related by Bowyer, and is authentic.

A Rev. Mr. Lake, fellow of St. John's College, Cambridge, was a nervous, excitable, dyspeptic man. He doctored himself by the rules and prescriptions of Cheyne. Becoming reduced by attending too strictly to Cheyne's prescribed regimen, or not understanding the matter sufficiently well, the invalid got worse, and at last came to London to consult Dr. Mead. In the presence of the great man, the patient gave him in detail all the plans he had followed in accordance with Cheyne's advice, as laid down in books. Mead, says Bowyer, "a proud man and passionate, damned Cheyne and his regimen. 'Follow my prescriptions,' said he, 'and I will set you up again.' But this was a disobedient, or, to use a common term, a crotchety patient, who would not go on without still dabbling in Cheyne. Might he follow such and such a rule of his golden author? was his constant query to the exasperated prescriber. At last the invalid, much improved, was about to leave, and, therefore, like an honest man and proper, asked his doctor what he was indebted to him. 'Ten guineas,' replied Mead; 'for though I have never before taken a fee of a clergyman you must not complain of being an exception, because you choose to prescribe to me, instead of following out my rules, and trusting to the advice you sought from me.' With this he received the money, but told the patient he might call upon him once more, upon which occasion he returned six of the guineas."

(To be continued.)

REVIEWS.

BOOK NEWS.

MR. WHARTON JONES has brought out a popular manual, entitled, *Defects of Sight, their Nature, Causes, Prevention, and General Management*. There is one advantage attached to whatever comes from the pen of Mr. Wharton Jones; namely, the complete dependence which may be placed upon it for exactness and fidelity. The position he holds in the world of science has placed him entirely beyond the contagion of clap-trap and pretension. Accordingly, we find this little work on the "Defects of Sight" to be a minute and truthful representation of his subject, to which the reader may have recourse for information and advice with implicit confidence. The present, along with the author's former work, entitled "The Wisdom and Beneficence of the Almighty as displayed in the Sense of Vision," will form an excellent popular epitome of the structure, uses, morbid affections, and hygienic care of the organ of vision, in the production of which the author has availed himself of whatever laborious research and original inquiry could afford on the one hand, or extensive practical experience on the other.—We have received the fourth edition of the *Clinical Lectures on the Diseases of Women and Children*, by Dr. Gunning S. Bedford, Professor of Obstetrics and Clinical Midwifery in the University of New York. The lectures are entirely practical, and delivered to the students in conversational terms, the patients in many cases present in the lecture-room. In consequence of this plan there is no definite system pursued in the lectures, but comments are made of the cases as they offer themselves, and thus a series of living pictures of disease is presented to the hearer and the reader. This system of instruction has many advantages, and is, indeed, an indispensable adjunct to ordinary systematic teaching. The cases described and commented upon in these lectures are very numerous and very much diversified, and they will amply repay perusal. It is to be regretted that we have not more books written on the same plan in our own country.—Dr. Tilt has issued a second edition of his work on *The Change of Life in Health and Disease*. He has taken great pains in collecting materials for this book, and since the last edition he has confirmed his previous views by the observation and detail of numerous new illustrative cases, connected

with the diseases of women at the critical period of their lives.—Mr. W. Parker, of Bath, has presented to the public a small pamphlet which he entitles "*New Physiological Views: with an Appendix on the Bath Thermal Waters*;" and his pamphlet, as presented to us, was accompanied by a printed handbill, in which Mr. Parker offers a reward of £100 to any person or persons who will refute, in writing, the principles unfolded in his "New Physiological Views." Mr. Parker is perfectly safe in offering this reward for a refutation of his views: for, after perusing his pamphlet, we can find nothing worth refuting. Whatever is true in its pages, is not new: and as to any novelty, we have not been able to discover it. Folly is no novelty, otherwise Mr. Parker's brochure might justly lay claim to the possession of the latter quality.—*A Report on the attack of Cholera in the central Prison of Agra, in 1856*, by Dr. John Murray, gives a brief but interesting account of the recent visitation in India of this fatal malady. The mortality was, as usual, very great, but in some cases the disease appeared to be checked in the onset by appropriate remedies. The best prophylactic was found by Dr. Murray to be quinine; and where the first symptoms of looseness or vomiting had already occurred, the remedy which was found most useful was a pill composed of opium, black pepper, and assafœtida. The medical details are accompanied by very copious tabular statements of the number of cases attacked, with the proportion of recoveries, together with the meteorological conditions which characterized the period when the disease was prevailing. This Report has elicited a warm expression of thanks from the local representative of the British Government.—In a pamphlet on the *Treatment of Iritis without Mercury*, Dr. Henry W. Williams, one of the surgeons of the Boston Dispensary in the United States, adduces a number of cases to prove that the mercurial treatment is not necessary in this formidable disease. The method which he has adopted consists in the application of leeches in the most severe cases, in the external use of atropia to cause dilatation of the pupil, in the administration of purgatives at first, and of morphia or opium to allay pain; and in the subsequent employment of sulphate of quinine and iodide of potassium. The author of the paper does not, however, maintain that all cases of iritis can be cured without mercury.—Dr. Thomas Luman, of Liverpool, has written a paper on *Certain painful Muscular Affections, simulating inflammatory, neuralgic, or organic disease*. He shows that these affections are very commonly induced, especially in delicate subjects, by any causes which fatigue the muscular fibres, such as excessive walking, leaning, straining, long continuance in one posture, laughing, vomiting, &c. The treatment is simple and efficacious, when conducted on correct physiological principles; but much mischief is often done by depletory measures, such as bleeding and mercurials, when the true nature of the complaint is mistaken.—A third edition of Dr. Hughes Bennett's *Introduction to Clinical Medicine* has just appeared. It contains many new woodcuts, and much additional matter. The work is so well known that we need only say that this edition is likely to prove even more useful than its predecessors. The method of examining patients, the use of the microscope and its application to diagnosis, are treated in a manner so simple, comprehensive, and practical, that the book is admirably suited both for the student and the busy practitioner.—Mr. Brown has brought out a second edition of his little book on *Scarlatina*. Additional experience has given him still greater confidence in the efficacy of the treatment he recommends, namely, the application of nitrate of silver to the throat, external counter-irritation, a mild aperient, a general tonic or stimulant regimen, and the use of acetic acid internally, given every four hours, of the Pharmacopœia strength, "half a drachm to each dose for a child under 3 years, increasing it to 2 drachms for one under 15, and still further if the fever is severe."—Several reprints of papers in other journals have been circulated.—Dr. Seaton's excellent paper on the *Protective and Modifying Power of Vaccination*, reprinted from the Journal of Public Health, well deserves attentive perusal.—Dr. Collis's paper on *Vesico-Vaginal Fistula* is interesting, as it contains the result of six cases operated on, two being completely successful. The method adopted was that of Hayward and Langenbeck, but Dr. Collis substitutes india-rubber cords, instead of pieces of bougie, or Sims's bars. The paper will be found in the last number of the Dublin Quarterly.—An elaborate paper by Dr. R. U. West, on *Cranial Presentations and Cranial Positions*, from the Glasgow Medical Journal,

is illustrated by some excellent engravings, and will be read with interest by practical obstetricians.—Dr. Charles Bell's papers, from the *Edinburgh Medical Journal* on *Inflammation of the Cellular Membrane of the Abdomen and Pelvis* form a pamphlet which is also a valuable contribution to the library not only of the accoucheur but of both physicians and surgeons. An important disease is illustrated which is not sufficiently understood, though great additions have been made to our knowledge during the last few years.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

CALCULI OF THE VELUM PALATI.

By M. ANSELMIER.

M. Anselmier relates two interesting cases, in which certain of the glands at the free edge of the velum palati had undergone dilatation, and become filled with calcareous matter. He is disposed to regard them perhaps as unique; for, in the recorded cases of calcareous deposit in these parts, there has been hypertrophy of the substance of the gland, amidst which the calcareous substance has been diffused, playing a mere secondary part. In these cases, however, the deposit was large in amount, and had led to a distension of the gland, or to a hypertrophy by dilatation. The distinction is of importance; for, while in the former case ablation is the means required for the removal of the obstruction to respiration, and other disturbances of function these bodies cause, in the present cases a far simpler procedure suffices. One of the cases occurred in a lad of 16. There were two tumours, the size of a nut, observed at the free edge of the palate, consisting of calcareous matter, which protruded from their surface here and there. The author applied to these points a mixture of equal parts of sulphuric acid and water, and had the throat gargled with a weak solution of the acid. The sulphate of lime thus formed issued from the swellings, which were soon dispersed, leaving the velum in its normal state, and in which it has continued. The other patient was a man, aged 25, and he exhibited three tumours of the palate, the size of peas. Although these were not easily entered by a probe, the sulphuric acid soon effected an approach to their calcareous contents, and a cure resulted.—*Union Médicale*. 1856. No. 128.

DELIRIUM TREMENS.

M. Delasiauve, after relating to the Paris Hospital Society some cases in which opium had been used with marked advantage, observed that there are two very different forms of this disease, the simple and the hyperacute. Cases of simple delirium tremens are inoffensive and easily cured,—the mere abstracting the patient from his habits of drinking sufficing. In these cases there is more or less excitement present, but not mania, properly so called. The patient is noisy, hebetude is present, and especially hallucinations or visions. He connects his ideas, which is not the case in mania, and his delirium only originates in his visions. He believes himself pursued or insulted, and he reasons falsely from false premises, but consistently with the ideas of his visions. Beyond this circle of ideas he is calm. In the hyperacute form the agitation is excessive, but solely depends upon the extreme multiplicity of the hallucinations, incoherence alone resulting from this rapidity. There is jactitation, the face is red and animated, the tongue is dry, and the breath is sometimes alcoholic. In some cases there is considerable fever and sweating, and we must then mistrust all remissions; for in some hours afterwards the symptoms may become urgent, and death occur unexpectedly. Hence the extreme importance of a prompt treatment by means of opium. If we resort to this without delay, the patient is saved, while if we neglect it he succumbs. M. Trélat drew attention to the difference between the sexes in this disease; for he has not met with examples of fatal cases at the Salpêtrière, like M. Delasiauve has at the Bicêtre—the mere abstraction of drink sufficing for recovery among women. M. Delasiauve at one time likewise believed this difference to exist; but he has since then met with several hyperacute cases among women. Examples of this severe form of delirium tremens, owing to the rapidity of its progress, are rather met with in general hospitals than in lunatic asylums.—*Union Méd.* 1856. No. 136.

ON DIABETIC GANGRENE.

By M. MARCHAL (DE CALVI).

In a paper recently read at the Academy of Sciences, M. Marechal referred to a case which he several years since communicated to the Academy, being the first recorded of diabetic gangrene. A man who had suffered from a succession of furuncles, exhibited gangrene of a toe without obvious cause. His urine was however found to be strongly saccharine. The gangrened part came away and the wound cicatrized; and by means of appropriate treatment the amount of sugar was so much diminished that he enjoyed tolerable health for about two years. Neglecting himself now, the glucosuria became again as bad as ever, and the whole of the same foot sphacelated. General symptoms ran high, so that amputation could not be performed, and the man died, no autopsy being permitted. During the progress of this case, M. Landouzy, of Rheims, met with a case of sphacelus of the lower extremities occurring in a diabetic patient; and, at a later period, M. Menestrel called the author in to another example. In a plethoric man, aged 60, a patch of gangrene was observed on one thigh and on the back, and on inquiry it was found that the patient had long suffered from great thirst, and passed much urine; this, also, upon examination, exhibiting a notable amount of sugar. In another case, also seen by M. Menestrel, a large gangrenous patch at the nape of the neck coincided with the presence of a large quantity of sugar in the urine.

There can, therefore, not be any doubt as to the existence of a diabetic form of gangrene; and in regard to its pathogeny M. Marechal believes the most natural interpretation to be, that the presence of sugar in the blood induces an inflammatory diathesis in the lining membrane of the vessels, and as the vital resistance is enfeebled in diabetes, the inflammatory irritation thus produced possesses a gangrenous tendency. This gangrenous inflammation affects especially the subcutaneous cellular tissue, and may be exhibited either in the form of successive furuncles, or in gangrenous patches. This view of the origin of the disease is an additional recommendation for the employment of alkalies in its treatment, owing to their antiphlogistic properties.

M. Marchal adds, that if sugar may give rise to these gangrenous inflammations, so also may an excess of uric acid. He has on many occasions observed furuncles, and even carbuncles, successively form under the influence of the uric acid diathesis. This may be cut short by the employment of the bicarbonate of soda, *intus* and *extra*, as has been the case with respect to a patient recently under the author's care, who had suffered from the development of large furuncles during his convalescence from an attack of rheumatic gout. It is a property of severe inflammations to induce an accumulation of uric acid in the blood, giving rise to so-called crises, having no essential relation to the disease.

If an excess of uric acid operate upon the interior of a large artery we may have produced an obliterating arteritis; and, consequently, a variety of the gangrenes so improperly termed *senile*, which are of commoner occurrence in England, where the mode of life subjects the interior of the arteries to an excess of stimulation. Thus, a gouty subject may furnish an example of sphacelus, not as a complication, but as a gouty accident, the arterial inflammation being of the same nature as the articular. Unfortunately, there is every probability that the practitioner, occupied in considering the effect rather than the cause, and keeping the gangrene solely in view, would give antiseptics, quinine, anodynes, and stimuli, adding thereby to the cause that has produced the inflammation of the artery and the death of the parts.

Union Méd. 1856, No. 144.

EXCERPTA MINORA.

Perforation of the Duodenum and of Cæcum.—M. Pawel relates an interesting case of a negro, æt. 30, who died of peritonitis suddenly supervening on fever. The duodenum was found perforated at its pyloric extremity, and near the aperture a bundle of ascarides was found. The appendix cæci had also acquired an adhesion to the internal iliac artery, by means of plastic lymph, and an aperture in the vessel established a communication between it and the cæcum. Of 28 perforations recorded in the *Bulletins de la Société Anatomique* almost one half took place in the cæcum, while only two occurred in the duodenum, M. Cruveilhier relating a third.—*Moniteur des Hôp.* 1857, No. 2.

FOREIGN CORRESPONDENCE.

FRANCE.

[From our Paris Correspondent.]

PARIS, February 6, 1857.

THE long discussion at the Academy of Medicine upon ovarian cysts is at an end. At least, the different orators heard upon that subject have been too discursive, and have spoken of facts indifferent to the first topic. Jules Guérin has been involuntarily the cause of the protraction of the debate. He suggested to the Academy the idea, that one of the causes of danger in the different operations upon the ovarian cysts is, the introduction of atmospheric air into the peritoneal cavity, and into the cyst itself. Unhappily he had given in proof of his theory several observations which appeared unsatisfactory to Velpeau, who expressed to the Academy his doubts, his suspicions, and became thus quite an opponent to the physiological schemes of the inventor of the subcutaneous method. Tuesday last, Malgaigne also took part in the question, and tried to prove by historical data that his opponent, J. Guérin, had no right to the invention of the subcutaneous method, which, according to his quotations, was known in the 18th century. All that is, as you see, very far from ovariectomy, injection of ovarian cysts, etc., etc.; but the new subject is not void of interest at the present moment, for the Academy of Sciences is awarding a prize to the subcutaneous method, so that if the discussion continues at the Academy of Medicine, I will give you an abstract of its more important points.

At the Academy of Sciences we heard last week a remarkable report of the learned chemist Chevreul, upon a new way of preparing wheat for panification. Mr. Mege Mouries, author of the proposed method, has shown by public essays, made before the Academical Commission, that he could obtain in a hundred parts of wheat, eighteen or twenty parts of excellent bread more than by the customary operations. According to the learned reporter, the bread prepared by this way is more pleasing to the taste than common bread. In several experiments made at the bakehouse of the hospitals of Paris, a hundred parts of wheat have given 86 or 88 parts of flour of best quality, quite suitable to make white bread, instead of 70 or 74 parts, which were formerly rendered. I have no need to insist upon the consequences of such a discovery, and of its applications in the economical and hygienic questions.

Last year, the Society of Surgery paid the greatest attention to a learned and long report upon the *Elephantiasis of the Scrotum*. The honourable and renowned reporter, Hte. Baron Larrey, has just published his complete work on that interesting subject; it will form an important part of next volume of "Memoirs of the Society of Surgery of Paris;" it presents a complete epitome of the question and the examination of all the cases hitherto published. I shall send you a due notice of such a book, which will excite a great deal of interest in England.

The *concours* at the Faculty of Medicine is going on. In the last fortnight we have heard the first lectures of pathology. The subjects were:—1. Scarlatina; 2. Hepatic colic; 3. Cerebro-spinal meningitis; 4. Acute phthisis; 5. Perforation of the stomach; 5. Ilcus. All these lectures, delivered extempore, have excited a great deal of interest among the students, who listen to them in great numbers. We shall have this and next week the lectures upon Surgery. The first was delivered yesterday, upon a surgical question, "The Wounds of Articulations."

The Imperial School of Military Medicine and Pharmacy has published this year, for the first time, an advertisement and a programme of its lectures. The students of that school are all graduated M.D.; they are inscribed in the army lists, and they receive at the Val-de-Grâce a practical education upon military hygiene and surgery, upon the diseases most frequent in armies, upon operative surgery, surgical anatomy, and clinical medicine. You have not in England such a school of military medicine, surgery, and pharmacy. The great military hospital of the Val-de-Grâce is annexed to the school; there the students attend the practical lectures; there all the Professors are, at the same time, practising Physicians or Surgeons. The Director of the College is Dr. Michel Lévy, now President of the Academy of

Medicine, one of our most active and clever inspectors of the sanitary service of the army; the Assistant-Director is Hte. Baron Larrey, of whom I spoke just now, son of the celebrated Larrey, whose name has been immortalised by his campaigns in Egypt, Germany, and Russia, under the first Emperor.

PROVINCIAL CORRESPONDENCE.

IRELAND.

[From our Dublin Correspondent.]

DUBLIN, Feb. 9, 1857.

LITERARY and scientific *conversazioni* have, during the last three or four weeks, been the order of the day in Dublin. It having been recently determined that papers should be read only on the alternate nights of meeting of the Surgical Society of Ireland, the very fine suite of rooms, consisting of the board-room, museum, and library of the College of Surgeons were brilliantly lighted, and thrown open on the evening of the 24th of January to a numerous assemblage of the fellows, licentiates, and visitors, both professional and lay. Some magnificent recent additions to the library were exhibited on the tables of the board-room; numerous microscopes were in requisition. The circulation in the frog's foot was admirably shown by the curator, Dr. John Barker. Mr. Benjamin Wills Richardson contributed a vast number of beautiful and most instructive microscopic preparations, sections of bone, teeth, etc., his own handiwork; and it was felt by all present that the evening had been most agreeably and profitably spent. The only defect in the arrangement was one which can, probably, be easily remedied before the next *réunion* takes place: the room adjoining the museum, which contains the splendid waxworks presented by the late Duke of Northumberland, was not sufficiently lighted to show off the collection to advantage.

A *conversazione* of the members of the Royal Zoological Society was held on the following Tuesday evening, by the invitation of the President, Lord Talbot de Malahide, at the residence of the Secretary, Dr. Ball, in Granby-row. His Excellency the Lord-Lieutenant, accompanied by Mr. F. Howard, private Secretary, and Lieut.-Col. Udney, A.D.C., arrived at twenty minutes to ten o'clock, and remained until half-past eleven. He was received by the President, the Archbishop of Dublin, Viscount Massarene and Ferrard, etc. There was an exceedingly large attendance, and the tables were covered with various curiosities and objects of interest. Among the specimens which attracted the largest share of attention were some large diagrams, representing two Russian twins (male and female), who presented the unusual spectacle of being joined together longitudinally,—their heads forming one solid mass, although their respective brains were quite distinct. As might naturally be expected, a remarkable amount of sympathy existed between the children, who lived until about a month old; and one having caught intermittent fever, it communicated itself immediately to the other, who, however, survived its companion's decease by seven hours. The most eminent Medical men at the Hospital in St. Petersburg, to which the twins were conveyed, gave it as their opinion that, but for the brain having been injured by the nurse in the transit, the children would have had every chance of surviving. Another principal feature in the collection of the evening was a stuffed chimpanzee. This animal died only six weeks since, and was the same whose docility and playfulness were the subject of general comment among the numerous visitors to the Zoological Gardens. The climate of this country has always proved fatal to animals of this class; but the chimpanzee at Paris, to which a pint of wine is daily given, has been kept alive for years. There was also upon one of the side tables a cast of the head of an ourang-outang, which when alive had stood six feet four inches in height, and being covered with the real skin, presented a most repulsive aspect.

On the evening of the 4th of February, the President of the Royal Irish Academy, the Rev. J. H. Todd, D.D., S.F.T.C.D., gave his first *conversazione* at the Academy House, Dawson-street. The splendid library and suite of rooms, including the Moore Library, were brilliantly illu-

minated, and the centre table was covered with a variety of the newest philosophical instruments, models, articles of rarity from the Crimea, and other places; the recent maps of the Irish Geological Survey; drawings and photographs of the new buildings in Trinity College and Oxford; a number of interesting anatomical preparations in *papier maché*; the typograph, or writing machine, for the blind, originally invented by Mr. Hughes of Manchester, and improved by Kennan and Son of Dublin; the newly-invented gas meter, by Mr. Sanders, which was practically explained. A number of beautiful stove and greenhouse plants, from the gardens of Trinity College and the Royal Dublin Society; and a stand of exceedingly rare and beautiful ferns, contributed by Professor Smith, of Eccles-street, served to brighten up the scene, and to shed additional lustre upon all. An electric light of great intensity was exhibited in one corner of the library, which contrasted forcibly with the otherwise brilliant gas. His Excellency the Lord Lieutenant and suite arrived after nine o'clock, and were conducted by the President and other members of the Council to the various attractive objects submitted for inspection. The rooms were crowded with the *élite* of the scientific and literary circles of the city. His Grace the Archbishop of Dublin, the Lord Chancellor, the Bishop elect of Cork, Lord Talbot de Malahide, Baron Greene, Sir Philip Crampton, Bart., the Provost of Trinity College, &c. The kind and affable attention of the President, the absence of all formality, and the very large collection of objects of extreme interest laid upon the table and scattered through the rooms, suggestive of profitable conversation, enabled those present to spend a most agreeable evening.

An address, with a most appropriate gift, consisting of a carriage and pair of horses, fully equipped, were recently presented by a large number of ladies and gentlemen assembled in the Music Hall, Belfast, to Dr. H. Purden, of that city, as a token of the esteem in which he is held as a Christian, a gentleman and a physician. Dr. Purden read a suitable reply.

GENERAL CORRESPONDENCE.

ARSENICAL POISONING BY A WALL-PAPER.

[To the Editor of the Medical Times and Gazette.]

In the number of the *Medical Times and Gazette* for January 24th, I perceive an inquiry for a case of arsenical poisoning by means of a paper decorating the walls of a room. The case is referred to as having been published in the *Medico-Chirurgical Review*. This inquiry puts me in mind that I can furnish a case of the same nature, and as it is a subject of some practical, if not scientific interest, I do not hesitate to request the favour of its insertion in your valuable periodical; and if it should indirectly interest the inquirer mentioned, I shall be all the more gratified.

In the year 1849 I ordered my own study to be repapered, and I selected for this purpose a neat paper, with only about two shades of green, of a bright and elegant tint. In a day or two after the room was papered I began to use it. I had a fair gas-light, and towards the evening I began to read. When about an hour and a half to two hours had passed, symptoms of severe depression seized me, soon followed by a feeling of nausea, and an inclination to vomit. There were occasional severe pains in the abdomen also, and the prostration was presently accompanied with a feeling of faintness which suspended my operations. It was evident to myself as a case of severe gastro-enteric irritation. The very same thing occurred on every successive evening when the door of the room was closed, the gas-light burning, and after I had remained in the room for about a couple of hours.

This sort of matter began to annoy me considerably, and I began to suspect there was something in the room itself which produced the evil, as I found out from experience that it never came on, except when I had remained in the room a certain time, under the circumstances detailed; and, also, that the unpleasant symptoms gradually subsided when I had left the room, a feeling of feebleness and some stomacic derangement alone remaining. Under these circumstances it was but natural that my attention should be directed to any altered conditions in respect to the room, and it was not long before the beautiful green of the paper, with which my room had been newly decorated, attracted my eye. I forthwith

scraped off with my penknife a portion of this beautiful green pigment, and placing it in a test tube, at once sublimed abundant crystals of arsenious acid, which I afterwards discovered it to be. So soon as I discovered this beautiful pigment on the paper to be Scheele's green, and no manner of doubt remaining as to its being the sole cause of the annoyance, I had it at once removed, the annoyance itself never reappearing. On mentioning the subject to the operative paperhanger, he informed me that some papers made him feel ill while hanging them. Since that time I have often noticed Scheele's green to be used in the formation of patterns on room papers, the pigment being recognised at once by two features—a brilliant and beautiful colour, and a little running in the colour, as if it did not take kindly or freely to the paper, but showed a little greasiness of surface.

In my own case the whole of the patterns were imprinted with this dangerous and noxious pigment, and hence the unusual severity of its effects.

I am, etc.

WILLIAM HINDS, M.D.

Birmingham, February 3, 1857.

UNION MEDICAL OFFICERS.

[To the Editor of the Medical Times and Gazette.]

SIR,—A meeting of the students of St. George's Hospital was held on Tuesday last, Charles Roberts, Esq., in the chair, for the purpose of supporting Mr. Griffin's movement, when, considering that each Hospital making different resolutions only tended to complication, the meeting was of opinion that it should adopt those passed at the London Hospital, as they were considered the best to answer the ends in view.

1st. That this meeting considers the payment of Union Medical officers under the present system totally inadequate to the demands made on their time, labour, and skill, the expenses to which they are necessarily put in the performance of their contracts, the risks they run in the execution of duty, and the responsibility that devolves upon them.

2nd. That this meeting considers that the Poor-law Guardians ought not to have the unlimited power of fixing the salaries of the Medical officers, in the reduction of which they have evidently a personal interest.

3rd. That, without pledging itself to details, this meeting cordially approves of the principles laid down in the petition to Parliament, drawn up at a meeting held at the Freemasons' Hall, on the 30th of May, 1856.

4th. That this meeting tenders its thanks to R. Griffin, Esq., for his exertions on behalf of the Union Medical officers, and promises him its cordial co-operation and support.

5th. That this meeting considers a speedy aggregate meeting of students advisable.

A Committee was then formed to represent the Hospital, consisting of Mr. Charles Roberts, Mr. Wintle, Mr. Clifton, and Mr. Hooper, Hon. Sec. The thanks of the meeting were then given to the Chairman for the able manner in which he had conducted the proceedings.

I am, &c.

JOHN H. HOOPER, Hon. Sec.

St. George's Hospital, S.W., Feb. 10, 1857.

PEPSINE.

[To the Editor of the Medical Times and Gazette.]

SIR,—I wish, through your columns, to warn those Practitioners who are making observations upon the method of treatment by "artificial digestion," of the presence in the shops of an article professing to be the "poudre nutritive," and resembling it in appearance, taste, and odour, but not containing a particle of pepsine. This is supplied by a French chemist, who professes to furnish the medicine of a definite power, and from whom I have at various times received it in a genuine form. The great demand that has arisen for the new medicine appears to have given rise to a careless method of preparation, which is calculated to bring it into undeserved disrepute. That the administration of such a powder should be destitute of all satisfactory results must follow from the complete absence of any transforming power in it. The advice I am, therefore, anxious to give to those who propose using the pepsine is to test previously in a bottle the transforming power of the powder supplied to them upon a drachm and a half of coagulated albumen or chopped meat, with the addition of about half an ounce of water. At the temperature of about 100° Fahrenheit, fifteen grains of

the powder should digest this quantity, with occasional agitation, in the course of twelve hours. If it fail to effect this it is useless as a medicine; if it succeed it may be confidently relied upon.

I am, &c.

EDWARD BALLARD, M.D.

Myddelton-square, February 2, 1857.

MEDICAL CERTIFICATES.

[To the Editor of the Medical Times and Gazette.

SIR,—At a meeting of the Tynemouth Medical Club, held on Tuesday, February 3, it was resolved that the Registrar-General be memorialized on the practice prevalent in this district of registering certificates of the cause of death given by persons without any qualification. It was also resolved that petitions be forwarded to the local Members, as soon as the proposed Medical Reform Bill is introduced into Parliament, praying for the insertion of a clause rendering the giving of a certificate by an illegal practitioner a penal offence. And further praying that power be given by the said Bill to all duly qualified Medical men to claim a fee for ever, Medical certificate furnished to a patient, or in the case of death, to his representatives.

Signed on behalf of the meeting,

W. L. EMMERSON, M.D.

106, Howard-street, North Shields, Feb. 3, 1857.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, February 3.

Dr. WATSON, President, in the Chair.

Some routine business having been transacted,

Dr. BRINTON read for himself and Mr. Hutchinson a report on the examination of Dr. Sibson's specimen of

PERFORATING ULCER OF THE STOMACH.

The conclusion arrived at was, that the disease was not malignant. Among the indurated tissues were small, isolated portions of pancreatic gland structure. Dr. Brinton's careful microscopic examination had not been able to discover any cells resembling those of cancer.

Dr. BRISTOWE showed a specimen of

GANGRENOUS ABSCESS IN THE LUNGS.

A man, aged 28, had been admitted under his care into St. Thomas's Hospital, on account of pleuro-pneumonia. He improved somewhat at first, but subsequently relapsed. Some weeks after his admission, it was noticed that when he coughed his breath had a fetid odour, which was not perceptible during ordinary respiration. About the same time he began to expectorate a prune-juice fluid, which was also fetid. Both these symptoms continued until the time of death, which occurred two months later. Cavernous breathing had been heard over the lower part of the left lung. At the autopsy, two spots of commencing gangrene, with consolidation around them, were found in the right lung. In the apex of the left was a gangrenous cavity of some size, and in its lower lobe was a yet larger one, surrounded by much old induration. No tubercles were found in the lungs. The lower part of the ileum was found much distended, the cæcum being obliterated and much constricted by the cicatrices of old ulcers. Smaller ulcers of the same character were found in other parts of the mucous membrane of the ileum. Dr. Bristowe suggested that the disease, both in the lung and the intestine, had commenced by the deposit of tubercle, a supposition which was supported by the fact that hæmoptysis had been among the earliest symptoms.

Mr. CURLING read a report of the conclusion of a case which he had formerly brought before the Society, in which had been performed

AMPUTATION OF THE HIP JOINT.

The patient, a woman in very bad health, had submitted to amputation on account of a large tumour on the thigh. After removal the disease proved to be medullary cancer deposited in the inter-muscular cellular tissue, and not connected with the bone. The patient recovered well, and lived nearly ten

months afterwards. Her last illness had been attended by the symptoms of a large growth in the chest. The autopsy had been performed in the country. The left lung was found compressed by a very large growth in the pleura, which the Surgeons who performed the autopsy agreed in describing as medullary cancer. There was, however, no deposit in any other organ of the body, and the lung tissue itself was quite free from disease. A portion of the tumour had been sent up to town and carefully examined by Dr. Andrew Clarke, who reported that it consisted merely of inflammatory products, and did not contain any of the elements of cancer. Remembering the circumstance that there were no deposits in the lumbar glands, or in any other viscera, Mr. Curling was inclined to agree with Dr. Clarke, and to think that his patient had died from inflammatory disease, and without any recurrence of the original one.

Dr. BENGE JONES next brought before the Society a specimen from a case of pneumothorax, in which there had been heard

METALLIC TINKLING PRODUCED BY THE HEART'S IMPULSE.

The patient, a man aged 25, had been ill two months, when he was admitted into St. George's Hospital on account of pneumothorax of the left side. The usual symptoms were present, and a splash might easily be produced by succussion. On ausculting the back of the chest, a metallic tinkling sound was found to be produced by each stroke of the heart. This continued to be a very distinct sign up to the time of death, which occurred more than a fortnight later. It was repeatedly listened to by the students, and the pulse could easily be reckoned by counting the tinkles. The autopsy showed pneumothorax, the fistula in the lung tissue being long and oblique. The pleural sac contained about five pints of thick fluid, and the pleural layers were very much thickened. Dr. Benge Jones remarked, that in an experience of about twenty years at St. George's Hospital he had only met with one similar case.

The PRESIDENT agreed with Dr. Benge Jones as to the rarity of the circumstance illustrated. He only recollected to have observed it in one instance.

Mr. BRYANT next showed a specimen of

BONY UNION AFTER FRACTURE OF THE CERVIX FEMORIS WITHIN THE CAPSULE.

Mary H—, aged sixty, a lunatic inmate of the Asylum at Guy's Hospital; five years ago, when walking in the garden, fell and fractured her right thigh-bone. All the symptoms of fracture of the neck of the femur within the capsule were present, clearly indicating the character of the injury. A long splint was applied; but much difficulty was experienced in preserving the leg in the right position, from the restlessness of the patient. After some weeks' confinement she was allowed to sit up, but her health soon began to fail, and she never walked again, and on June 30th she died. The specimens shown consisted of the upper parts of both thigh-bones. On the injured side union was complete, and had partly been effected by bone, partly by cartilage, and in part by fibrous tissue. The whole of the neck had been absorbed, and the articular head was united directly to the base of the great trochanter. The union was very firm, and the head of the bone was much indurated.

Dr. OGIER WARD showed a specimen of

ANEURISM OF THE CORONARY ARTERY.

An old man had died suddenly, death occurring about a quarter of an hour after the first symptoms. At the post-mortem the heart was found hypertrophied, but there was no valvular disease. There was extensive atheromatous disease of the aorta, and two aneurismal dilations just above the semilunar valves. One of these involved the commencement of the coronary artery, and had given way externally into the pericardium. The pericardium contained about half-a-pint of blood.

Mr. NUNN exhibited a specimen of

FIBROUS TUMOUR OF THE OVARY.

The tumour weighed between 6 and 7 lbs., and was irregularly oval in shape. It appeared to have been developed in the right ovary, but had contracted firm adhesions with the omentum and adjacent parts. It had no connexion whatever with the uterus, which was very small and ill developed. When cut across, its external layer, about half an inch in thickness,

was found to consist of white calcified material, and its interior of a tough fibrous structure of dark purplish colour. The right ovary was healthy; but pedunculated on the right side of the uterus was a nodulated fibrous tumour, the size of an orange. The section of the latter showed a white surface, crossed irregularly by radiating bands.

Dr. BRISTOWE remarked on the extreme rarity of fibrous tumours of the ovary, and suggested that this was probably a growth which had been separated by enucleation from the uterus itself.

Mr. NUNN replied that its distance from the uterus, and the absence of the right ovary, seemed to him to indicate that the tumour had been developed in the structure of the latter.

Mr. HUTCHINSON said, that the tumour to him was not at all like a fibrous one. The calcification of its outer layers only seemed to point to its having been originally a cyst; its internal structure was evidently very different from its outer wall, and he would suggest that it was a specimen of an ovarian cyst, which had undergone consolidation.

After some conversation Dr. Brinton and Mr. Hutchinson were appointed to examine the specimen and report to a future meeting.

(To be continued.)

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS.—MONDAY, FEB. 9.

CRIMINAL LUNATICS.

Mr. FLOYER asked the Secretary of State for the Home Department whether it was his intention to take any steps in the present session of Parliament towards making adequate provision at the public expense for the maintenance and care of criminal lunatics?

Sir G. GREY hoped a beginning might be made in providing such an establishment, but was unable to say whether a vote would be taken in the present session. Inquiries were being made with regard to the site and the expense.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 6th inst. :—

ASKHAM, HENRY FRANCIS, Eckington, Derbyshire.
BRADSHAW, ALEXANDER F., Bishopsgate-street Within.
FULLER, CHARLES C., Osnaburgh-street, Regent's-park.
HUNTLEY, WILLIAM ALBERT, Brixton.
HUTCHESON, R. W., Eleuthera, Bahamas, West Indies.
MACKENZIE, JOHN THOMAS, Toronto, Canada West.
MASON, BENJAMIN EARNSHAW, Calcutta.
MEREDYTH, ADOLPHE ASCHELE W. L. C., Angers.
NOYES, ALFRED WILLIAM FINCH, Gosport, Hants.
SCOTT, WALTER, Van Diemen's Land.
SKINNER, FREDERICK, Hendon, Middlesex.
TIMES, HENRY GORSUCH, Thayer-st., Manchester-sq.

At the same meeting of the Court Mr. RICHARD EVANS passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College, his diploma bearing date the 6th of February, 1857.

The following members of the College having undergone the necessary examinations were admitted Licentiates in Midwifery at the meeting of the Board on the 10th inst.

DAVIS, WILLIAM FARQUHAR, Grosvenor-street.
DAVIES, HENRY NAUNTON, Cymmer Works, Pontypridd.
HAMILTON, JOHN ECCLES, Royal Navy.
HIPPOLYTE DE NICEVILLE, C. F., Clifton, Bristol.
HUTCHESON, ROBERT WILLIAM, Bahamas, West Indies.
LUKE, JOSEPH, Claremont-square, Pentonville.
ROBERTS, THOMAS LEWIS, Australia.
RUSSELL, GEORGE, Morthyr Tydvil.
SMITH, HENRY TYRWHIT, Melton Mowbray.
SMITH, JOSIAH SIDNEY, Tiverton, Devon.
TIMES, HENRY GORSUCH, Thayer-street, Manchester-sq.
WILLIAMS, CHARLES, Dolgelly.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, January 29.

DANIEL, WILLIAM COLE, Newport Pagnell.
HUGHES, WILLIAM EVAN, Bont-bach, Llanrwst.
KNAGGS, WILLIAM ANGELO, Brompton.
SMITH, WILLIAM, Preston.
WOODWARD, ALFRED, Bicester, Oxon.

DEATHS.

AIKMAN.—Jan. 29, at East Linton, Prestonkirk, on the 29th inst., George Aikman, Esq., Surgeon, deeply regretted.

GARDNER.—Feb. 3, at Greenwich, William Gardner, Esq., Surgeon, formerly and for many years of Streatham Common. Aged 78.

HUGHES.—Feb. 1, aged 62 years, Richard Hughes, Esq., Surgeon, of Nantwich, Cheshire.

NICE.—Feb. 4, at Tottenham, in his 21st year, Mr. Charles Nice, Medical Student at King's College, London.

POWER.—Feb. 8, at Haslar Hospital, Richard Blizard Power, Esq., Assist. Surgeon, R.N., aged 30. The trials and hardships endured in the Crimean war led to his premature end. M.R.C.S.E., 1847.

WATSON.—Jan. 27, aged 34, James C. Watson, M.D., H.E.I.C.S., Bengal Presidency. May, 1845, 58th Native Infantry.

APPOINTMENTS.

Her Majesty has been pleased to appoint Edward W. Alexander, Esq., to be Colonial-Surgeon for the Island of St. Helena.

Dr. SANDWICH, whose name is so well known to the public in connexion with the siege of Kars, has been appointed Colonial Secretary of the Mauritius, in the room of Mr. C. J. Bayley, now Governor of the Bahamas.

TESTIMONIAL.

Last month a handsome gold chronometer watch, with chain and seal, was presented to Ernest P. Wilkins, Surgeon, Newport, Isle of Wight. This testimonial was given as a mark of esteem for professional services—the former by William B. Mew, Esq., Mayor of the Borough of Newport, and his family—the latter by James A. Mew, Esq.

ASSOCIATED SOCIETIES OF THE UNIVERSITY OF EDINBURGH.—On Wednesday a meeting of the Council of Delegates was held in the Societies' Hall, for the purpose of receiving the votes of the members in the election of a President, in room of Sir E. Bulwer Lytton. The candidates proposed were Lord John Russell and Sir John M'Neill, G.C.B. Notwithstanding a very active canvass on behalf of Lord John Russell by the Whig party, Sir John M'Neill's election was carried by a large majority.

MUNIFICENT BEQUESTS.—The late Sir Hugh Richard Hoare, of Stourhead, Wilts, and Lillingstone Lovell, Bucks, who died on the 10th ult., upon entering his 70th year, in November last, presented £1000 to the Bucks Infirmary. We have now the pleasure to state that he has, by his will, made the following munificent bequests—viz. : To the Westminster Hospital, £2000; St. George's Hospital, £1000; Middlesex Hospital, £1000; Cancer Hospital, £1000; Consumption Hospital, £500; Medical College, £500; Sarum Infirmary, £500; with other charitable bequests, amounting to £11,000.

HOSPITAL FOR CONSUMPTION, BROMPTON.—On Thursday a meeting of the friends of this charity was held at the board-room of the Hospital, at Brompton. From the report of the committee it appears that the recent extension of the building, by which the number of wards was more than doubled, and the beds at once increased from 90 to 230, has enabled the committee to meet the urgent claims of the afflicted poor, without the tedious and dangerous delay of treatment otherwise inevitable. The Hospital, being completed to the extent originally contemplated, now possesses every appliance necessary for the consumptive patient, and adequate funds are only needed to keep it in full and constant operation. Application has been made to some of the different Medical examining Boards in the Metropolis to recognise attendance on the Hospital for Consumption as part of the Medical practice required

of candidates for examination. Favourable replies have been received from the University of London, the Apothecaries' Company, the Navy Medical Department, and the East India Company.

Dr. KANE's volume, "Arctic Explorations," has had a sale of more than thirty thousand copies in the United States. It is about to appear in Germany, under the auspices of Baron Humboldt; and in France is to be edited by M. de la Roquette.

BELFAST BRANCH OF THE MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.—The stated annual meeting of the subscribers and friends of this local branch of the above most excellent and valuable Society was held on the 2nd instant, Dr. Patterson presiding on the occasion. The meeting was influentially attended, as usual, and a very satisfactory statement made of the past year's proceedings.

THE QUEEN'S UNIVERSITY IN IRELAND.—The report of the state and progress of the Queen's University in Ireland has just appeared in print. It emanates from the Chancellor of the University, and is dated September, 1856. At the public meeting of the University, held on the 11th of October, 1855, only three of the entire list of candidates for degrees were rejected as incompetent. The sum required to defray the expenses of the University for the year ending the 31st of March, 1857, amounts to £2415, of which £1510 goes for the salaries of examiners, and £475 for exhibitions, prizes, and medals. The bulk of the book is filled up with extracts from the examination papers, the subjects embracing almost every branch of literature, science, and natural philosophy, even German metaphysics not being excluded from the curriculum.

POOR-LAW MEDICAL REFORM ASSOCIATION.—At a Meeting of the Committee, which was most numerously attended by members from various parts of the country, (Richard Griffin, Esq., in the chair,) held at No. 37, Soho-square, on Tuesday the 10th instant, several letters were read from Noblemen, Members of Parliament, and others, expressive of their sympathy and willingness to co-operate with the Committee for an improved system of Poor-law Medical relief. The present position of the question having been considered, it was resolved to convene a General Meeting of the Union Medical officers, and other members of the profession, to petition the Legislature for a redress of the grievances complained of. A Sub-Committee was appointed to frame a Petition for presentation to the House of Commons; also, one to be signed by the magistrates, clergy, and other rate-payers who feel that the present system is unjust both to the poor and to the medical officers.

CITY SEWERS COMMISSION.—At a meeting of the Commissioners on Tuesday, at Guildhall, Dr. Letheby presented his yearly report on the illuminative power and chemical quality of the gas supplied to the city by the Great Central Gas Consumers' Company, from which it appeared that its luminosity during the year was equal to that of 12.85 sperm, or 14.7 wax candles. This was nearly 23 per cent. over the standard illuminating power required by Act of Parliament. The chemical quality of the gas was also remarkably good during the first nine months of the year, but during the last three it had contained a notable proportion of sulphuretted hydrogen and an excess of ammonia. The report on the sanitary state of the city showed a considerable increase in the proportion of deaths over that of the last few weeks, the total number of deaths for the week being 70, of which 19 occurred among young children, and 18 among persons of 60 years and upwards. There was also a comparatively large mortality among persons of from 15 to 30 years of age. The chief causes of death were diseases of the respiratory organs, 14 having been occasioned by bronchitis, and 12 by phthisis and pneumonia. Many of the deaths were the results of disease set afoot by the cold of the last ten days. Excepting whooping cough, which is rather prevalent, zymotic diseases are almost entirely absent from the city.

MORTALITY NOTABILLIA.—The deaths registered in London, which had been, in the first week of January, 1135, and in the last week of the same month 1209, rose, in the week that ended last Saturday, to 1368. In the years 1847-56, the average number of deaths in the weeks corresponding with last week was 1180. If this average is raised for the purpose of comparison, proportionally to increase of population, it will become 1298; hence the rate of mortality which prevailed last week was higher than the average rate in the beginning

of February. The increase, which the present return shows, on the deaths in January, arises from the recent depression of temperature, which commenced towards the end of that month, and continued till near the end of last week. The deaths from diseases of the respiratory organs, the class which, more than others, rises and falls with the fluctuations of heat and cold, rose last week to 359; they had been for some previous weeks about 280. The average of this class, corrected for increase of population, for ten weeks corresponding with last week, is 285.

DEATHS IN PUBLIC INSTITUTIONS for the Weeks ending Saturday, February 7:—

	In the Week ending Jan. 31.			In the Week ending Feb. 7.		
	Males.	Females.	Total.	Males.	Females.	Total.
Workhouses.. .. .	62	72	134	120	132	252
Prisons	2	..	2	6	..	6
Military and Naval Asylums	18	19	37	49	28	77
General Hospitals	5	3	8	6	2	8
Hospitals for Special Diseases .. .. .	..	..	..	1	..	1
Lying-in Hospitals	1	..	1	1	..	1
Military and Navy Hospitals	1	..	1	1	..	1
Hospitals and Asylums for Foreigners	1	1	2	1	..	1
Lunatic Asylums	7	8	15	8	5	13
	96	103	199	192	167	359

The following are the number of Deaths from Small-pox, Measles, Scarlatina, Hooping-cough, Diarrhoea, and Typhus, in the several Districts of London, for the past Week:—

	Population.	Small-pox.	Measles.	Scarlatina.	Hooping-Cough.	Diarrhoea.	Typhus.
West.....	376,427	1	7	3	12	2	2
North	490,396	..	11	4	3	1	9
Central ..	393,256	1	3	4	21	1	7
East	485,522	..	6	6	9	3	11
South	616,635	1	11	8	16	1	9
Total..	2,362,236	3	38	25	61	8	38

DEATHS REGISTERED in the Metropolis for the Week ending Saturday, February 7, 1857.

CAUSES OF DEATH.	In the Week ending Saturday, Feb. 7, 1857.						Averages of Temperature and Deaths in 10 Weeks.
	Deaths of Persons.						
	AT ALL AGES.	Under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.	At 80 Years of Age and Upwards.	
Mean Temperature	32° 3						41° 0
ALL CAUSES	1368	562	180	266	301	59	1180 0
SPECIFIED CAUSES	1366	560	180	266	301	59	1174 0
DISEASES:—							
1. Zymotic Class	201	165	13	12	8	3	240 5
2. Dropsy, Cancer, and others of uncertain seat	65	8	7	23	24	3	45 8
3. Tubercular Class	237	83	83	64	7	..	192 0
4. Of Brain, Nerves, etc.	147	46	11	41	42	7	133 3
5. Of Heart, etc.	66	6	15	17	26	2	45 6
6. Of Respiratory Organs	359	143	20	71	113	12	258 9
7. Of Digestive Organs	65	26	11	13	14	1	65 1
8. Of Kidneys, etc.	18	..	4	8	6	..	12 4
9. Of Uterus; viz.—Puer- peral Disease, etc.	7	..	4	3	..	..	8 8
10. Of Joints, Bones; viz.— Rheumatism, etc.	3	2	1	..	..	..	8 3
11. Of Skin, etc.	6	..	1	3	2	..	2 3
12. Malformations	5	5	..	..	..	..	4 0
13. Debility from Premature Birth, etc.	25	25	..	..	..	..	32 2
14. Atrophy	43	28	..	3	11	1	25 5
15. Age	64	..	..	..	38	26	59 0
16. Sudden	6	3	1	1	..	1	9 6
17. Violence, Privation, etc.	49	20	9	7	10	3	20 7
CAUSES NOT SPECIFIED	2	2	..	..	..	..	6 0

ORIGINAL LECTURES.

LECTURES

ON

GENERAL NATURAL HISTORY.

BY THOMAS H. HUXLEY, F.R.S.,

Lecturer on General Natural History at the Government School of Mines,
and Fullerian Professor of Physiology, Royal Institution.

LECTURE X.

(Continued from page 135.)

THE next four somites, proceeding anteriorly, have a similar general character to that which has just been described, but they cease to be moveable upon one another, partly by reason of the calcification of the interepimeral and intersternal membranes, partly on account of the development of these membranes by a folding inwards, or involution, into processes, the "apodemata," which project towards and unite with one another in the cavity of the thorax. In an *Astacus* which has been macerated, or, better, boiled in caustic alkali, the floor of the thoracic cavity is seen to be divided into a number of incomplete cells, or chambers, by these apodemal partitions, which will be observed, on careful examination, to arise partly from the intersternal, partly from the interepimeral membrane connecting every pair of somites. The former portion of each apodema is called by Milne Edwards the "endosternite" (a), the latter the "endopleurite." As a general rule, each endosternite is distinguishable into three apophyses—the "arthrodial," which passes outwards and unites with the descending division of the endopleurite to form one boundary of an articular cavity for a limb; the "mesophragmal," which passes inwards, uniting with its fellow, and forming an arch over the passage left in the middle line between each pair of endosternites—the so-called "sternal canal;" lastly, the "paraphragmal" division is a small process, which passes forwards, upwards, and outwards, and unites with the anterior division of its own endopleurite, and with the posterior division of the endopleurite in front of it.

The endopleurite, likewise, divides into three apophyses, one descending or arthrodial, and two which pass nearly horizontally inwards; the anterior horizontal apophysis uniting with its own paraphragmal apophysis, the posterior with the paraphragmal of the antecedent endosternite. The posterior horizontal apophysis, therefore, crosses the space between every pair of apodemata diagonally, whence the appearance of a double row of longitudinal cells opening above, on each side of the sternal canal. It will be understood, however, that these cells are very incomplete, communicating with one another anteriorly and posteriorly, by the large apertures left between the endosternites and endopleurites; and, laterally, by the spaces between the endosternites, by which each series opens into the sternal canal; while above they are in free communication with the thoracic cavity. The apodemata give attachment to the muscles of the appendages, and the chain of ganglia and sternal artery lie in the sternal canal.

The appendages of the penultimate, resemble those of the last, thoracic somite, but the three preceding pairs differ from them by being chelate, that is, by having the posterior distal angle of the propodite produced so as to equal the dactylopodite in length, and thus constitute a sort of opposable finger for it (Fig. 1, G 7). The first ambulatory leg, again, is remarkable for its great size and strength, and for the ankylosis of its basipodite with the ischiopodite.

The four anterior pairs of ambulatory limbs differ from the last pair in possessing a long curved appendage (d), which ascends from the coxopodite, with which it is articulated, and passes into the branchial chamber, in which it lies. This is the "flagrum," or "epipodite;" its relation to the function of respiration will be adverted to presently.

The sterna, which are wide in the three hindmost thoracic somites, become very narrow and almost linear in the anterior ones. They and their apodemata, however, remain perfectly recognisable.

The sternal regions of the three maxillipedary somites have the same characters their appendages, and articular cavities becoming smaller; while by the contemporaneous excessive narrowing of the interarticular regions of the sterna these cavities are closely approximated.

The sternum of the next anterior somite (bearing the second pair of maxillæ), on the other hand, though very narrow from before backwards, has a considerable width, and its articular cavities, already much larger than those of the anterior maxillipedary somites, are consequently thrown outwards. Hence results a sudden widening of the second maxillary, as compared with the first maxillipedary somite; and, as a consequence, we find a deep groove or fold separating their epimera. Now this groove is directed upwards and backwards on the flanks of the body, so as to be parallel with an important impression on the carapace, the "cervical suture." Not only on this ground, but because, as I shall endeavour to show by and by, the fold really represents a true neck, or separation between the head and thorax, it may be appropriately termed the "cervical fold." The "scaphognathite," (C, c, d,) an important appendage of the second maxilla, lies in this cervical fold.

The appendages of the three maxillipedary somites (D, E, F,) are highly interesting, from affording transitional forms between the ambulatory and the strictly oral limbs. Each maxillipede is composed of three divisions, articulated with a stout coxopodite (b). The outermost of these divisions is a curved, elongated lamina (d), precisely resembling the epipodite of the posterior thoracic limbs in the two hinder maxillipedes, but in the anterior not modified so as to serve as a branchia, and rather approaching the scaphognathite in form.

The middle division of each maxillipede (c), answering to the exopodite, is long, slender, many-jointed, and palpiform, while the inner division, or endopodite, (a, b,) not only corresponds with one of the ambulatory limbs, but in the posterior maxillipede (F) very closely resembles one. In the next maxillipede, however (E), the endopodite is proportionally shorter, and in texture and form rather approaches the foliaceous endopodite of the anterior maxillipede (D).

The intermaxillary apodema, or that developed from the connecting membrane of the two maxillary somites is very remarkable for its stoutness and for the great size and expanded form of the mesophragmal processes, which unite into a broad plate, whence processes are sent forward and outward in front of the tendon of the great adductor mandibulæ muscle on each side. This process appears to be the calcified posterior horizontal apophysis of the mandibulo-maxillary apodema, which elsewhere remains membranous.

The second maxilla (C) resembles the anterior maxillipedes, but the epipodite (d) and exopodite (c) are combined into a wide oval plate, the scaphognathite, of which mention has already been made. In the first maxilla (B) the epipodite and exopodite appear to be undeveloped, and the joints of the endopodite are completely foliaceous. The somite which supports the mandibles is to a great extent membranous in its sternal region, and is united with the corresponding region of the first maxillary somite, itself represented merely by a narrow, distinctly calcified, band in front of the second maxillary sternum, by membrane only. In this membranous space the elongated aperture of the mouth is situated.

On each side of the mouth are two little elongated oval calcareous plates, between which, an oval process, setose at its extremity, proceeds downwards and forwards, and lies in close apposition with the posterior face of the mandible of its side. This is one-half of what is termed by most authors the labium, but, to avoid confusion with the labium of Insecta, from which it is wholly different, it may be called the *metastoma* (Fig. 2, f.)

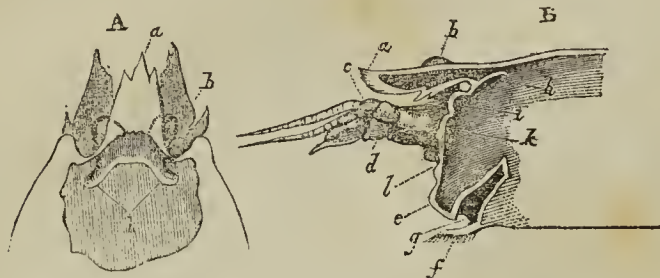
The mandibles fill up a large space in the sternal membrane, with which their edges are continuous on each side of the oral aperture; externally the sternal membrane bends suddenly downwards into the pleural ridge, continuous with the branchiostegite of the carapace, and becomes calcified; while anteriorly it is very difficult to say where the mandibular sternum terminates. In front of the mouth the sternal membrane becomes developed into a large median lobe, containing

(b) As I have already stated, M. Milne Edwards terms those appendages which are modified to subserve mastication "gnathites"; and in naming their parts, while retaining the prefixes coxo-, basi-, etc. he substitutes -gnathite for -podite. I confess, however, that I do not see what is gained by this change. On the contrary, it seems to me rather to tend to obscure the due appreciation of the homologies of the parts.

(a) I have altered the termination -al into -ite, in conformity with the general system of terminology which I have adopted.

three small calcareous plates on each side of the middle line. This is the labrum (Fig. 2, e).

FIG. 2.



A. Anterior extremity of cephalothorax of *Astacus*, with a portion of the carapace removed. B. Vertical section of cephalothorax. a. Rostrum. b. Ophthalmic peduncles. c. Antennulæ. d. Antennæ. e. Labrum. f. Metastoma. g. Oral aperture. h. Procephalic lobes. i. Ophthalmic sternum. k. Antennular sternum. l. Antennary sternum.

The mandible itself (Fig. 1, A.) is thick and strong at its inner end, where it is divided by a deep excavation into an upper and a lower portion, (a, b,) the edge of each being toothed. The outer division of the mandible extends along the whole width of the somite, and tapers to its extremity, which presents an articular head, the outer condyle. The anterior margin is closely connected with the posterior margin of the epistoma, and attached to it is the palp (c), which represents the terminal joints of the mandibular endopodite. The exopodite and the epipodite have no representatives in this appendage.

Superiorly the outer portion of the mandible is concave, and its posterior edge gives attachment to the calcified tendon of the adductor mandibulæ (d).

In front of the labrum and mandibles is a wide, somewhat pentagonal area, prolonged into a point in the middle line forwards, and presenting a small spine on each side; this is the "epistoma," (Fig. 2, b), and it is chiefly, if not entirely, formed by the sternum of the antennary somite. On each side of its triangular anterior extremity it presents a wide articular cavity for the articulation of the antennæ. In these organs (Fig. 2, d) the same parts can be recognised as in the other appendages, viz., an imperfect basal joint, produced into a prominent cone, perforated behind and internal to, its apex; and here called "coxo-cerite." Next, a "basicerite," to whose outer portion a flattened plate, the representative of the "exopodite," and here called the "scaphocerite," is articulated; while to its inner portion an "ischio-cerite" is connected, bearing a "mero-cerite" and "carpocerite," while the last segment, or "pro-cerite," consists of a long multi-articulate filament.

The sterna of the next two somites are narrow and elongated; that of the antennary somite is well calcified, but that of the ophthalmic somite is almost entirely membranous.

The antennules (Fig. 2, c) present an enlarged trigonal basal joint, succeeded by two others. These represent the protopodite, and carry at their extremities two many-jointed filaments, representing the exo- and endopodites.

The peduncles of the eyes (Fig. 2, b), lastly, are composed of two joints, a small proximal "basiophthalmite," and a larger terminal "podophthalmite."

Such are the structure and arrangement of the sternal portions of the separate cephalothoracic somites, and the nature of their appendages. On regarding the sternal region as a whole, there are yet some very important points (whose morphological value has been fully pointed out by Milne Edwards), to be noticed. A longitudinal median section, in fact, shows, that while a line drawn through the sterna of the somites behind the mouth is nearly straight and parallel with the axis of the body, a similar line drawn through the sterna of the somites in front of the mouth ascends considerably, while it passes through the antennary sternum; and in the antennular and ophthalmic sterna takes a position at right angles to its former course (Fig. 2 B). The sterna of the somites in front of the mouth are, therefore, bent up so as to look forwards instead of downwards; and I would direct particular attention to this "cephalic flexure," as I shall henceforward call it, because it is only by bearing it in mind that we can comprehend the structure of the head in these or other *Articulata*. I have hitherto said nothing of the terga of the cephalothoracic somites; and as this part of the subject involves questions under dispute, I will at present lay before you merely what I believe to be the indisputable anatomical facts.

We find, then, that just as the lateral regions of the abdominal somites are produced into what I have called the *pleura*, so are the lateral regions of the cephalothorax similarly produced. Thus the membranous lateral walls of the last cephalothoracic somites are reflected superiorly, and bent down again to the level of the bases of the legs, where they become continuous with a calcified layer corresponding with the tergal half of the pleura, and forming the posterior part of the carapace. In like manner are the more or less calcified epimera of all the other somites reflected superiorly into a membrane which passes downwards, and whose free lower edge is continuous with the edges of the carapace. The carapace, therefore, corresponds in position with the terga and tergal halves of the pleura of all the somites which are thus reflected into it, and these somites include all, without exception, from the last thoracic to the ophthalmic. Posteriorly the edges of the carapace are a little prolonged beyond the last thoracic somite, and take the form of a fold, with an under layer distinct from the upper. Anteriorly in the middle line the carapace is prolonged in a similar manner, but to a much greater extent, forming the long rostrum which overhangs and obscures the view of the sterna of the ophthalmic and antennular somites. At the sides of the antennular and antennary somites the rostral prolongation of the carapace is the direct continuation outwards of the epimera of those somites, and there is nothing to be compared to an apodema; but the sternum of the ophthalmic somite, after giving off the lamella which forms the inferomedian region of the rostrum, is prolonged on each side of the middle line backwards and outwards into a free, expanded, thin, calcified process, which applies itself against the carapace by its upper surface, and by its under gives attachment like an apodema to the anterior gastric muscles. These processes appear not to have been specially noticed, though they exist in all the *Podophthalmia* which I have examined. Corresponding processes are developed in some *Crustacea* (e. g. *Galathea*, *Carcinus*), for the attachment of the posterior gastric muscles. From the last thoracic to the maxillipedary somites the pleural, or free part of the carapace, termed, from its function, the "branchiostegite," is a deep process, and incloses a wide space bounded internally by the epimera of the somites, the "branchial chamber." In front of the maxillipedes and cervical fold, however, the chamber suddenly becomes narrowed by the rapid widening of the sterna of the maxillary and mandibular somites, and by the lowering of the point at which the reflection of their epimera into their pleura takes place. Finally, on the antennary somite, and in front of it, the pleuron becomes a mere fold separated by a shallow groove, the representative of the branchial chamber, from the epimera.

On the dorsal surface there is no indication of any division of the carapace into terga corresponding with the sterna of the somites, but it is marked by a well defined, curved groove, whose posterior convexity extends across the carapace, rather behind its middle, and whose lateral curve runs downwards and forwards towards the anterior part of the antennary sternum. This is the "cervical suture" of Milne Edwards; that part of the carapace which lies in front of it he terms the "cephalic arc," while that which is behind is the "scapular arc;" but it will be better, perhaps, to adopt the terms "cephalostegite," "omostegite," as more in harmony with the general system of nomenclature which has been adopted.

The omostegite, again, is divided into three portions by a groove on each side of the middle line—the "branchiocardiac" lines or sutures. Now, you will find that this branchiocardiac suture, and the lateral portion of the cervical suture, on the dorsum of the carapace, correspond very closely with the line at which the epimera are reflected into the pleural membrane, on its ventral surface. The transverse portion of the cervical suture, on the other hand, corresponds with the posterior boundary of the stomach, and the anterior extremity of the heart, and continues inwards the line of the cervical fold; so that, in a longitudinal section of an *Astacus*, you will find that the direction of the cervical fold, if followed upwards and backwards, will strike against the inner surface of the carapace, at a point corresponding with the summit of the cervical suture, on its outer surface. By cutting through the cervical fold, therefore; through the membrane joining the second maxillary with the first maxillipedary sternum; and through the carapace in the transverse part of the cervical suture, it is possible to separate an anterior portion of the cephalothorax, containing the whole of the cephalo-

stegite, and the first six somites, with their appendages, from a posterior portion, consisting of the omostegite, and the last eight cephalothoracic somites. And, in making this artificial separation, we should be merely carrying out a distinction between these two sets of somites, already very clearly indicated by the cervical fold and suture. I shall have to advert particularly to these facts, in considering the general theory of Crustacean structure by-and-bye.

Another mark upon the earpace is a large and rounded convexity, occupying nearly a third of the whole width of the posterior half of the cephalostegite. This impression is bounded internally by a line drawn from the outer angle of the base of the rostrum, directly backwards, and externally by a curved depression, deepening into a pit anteriorly; it corresponds with the attachment of the base of the adductor mandibulæ muscle, and we shall find a similar impression an important landmark, in other *Crustacea*.

(To be continued.)

A COURSE OF LECTURES

ON THE

NATURE AND TREATMENT OF THE DISEASES OF THE EAR.

DELIVERED AT

St. Mary's Hospital Medical School.

By JOSEPH TOYNBEE, F.R.S.

Aural Surgeon to St. Mary's Hospital, Lecturer on Aural Surgery at St. Mary's Hospital Medical School, and
Consulting Aural Surgeon to the Asylum for the Deaf and Dumb.

(Reported by JAMES HINTON, Esq.)

LECTURE XI.

MEMBRANA TYMPANI.

Diseases.

IN describing to you the diseases of the Membrana Tympani, I shall speak in succession of its Epidermoid, Dermoid and Fibrous layers, and I shall leave the consideration of the Mucous layer till I speak of the diseases of the tympanic cavity.

1. *The Epidermoid Layer.*—The epidermoid layer is sometimes secreted in such large quantities as to form a mass several lines in thickness, on the outer surface of the dermis. In some cases I have known this mass to be composed of six or seven laminae closely packed upon each other. The symptoms attendant upon the accumulation, are analogous to those occurring in cases of accumulation of epidermis in the meatus; there is also often a considerable degree of cerebral irritation dependent upon the pressure on the chain of ossicles. The treatment in these cases is similar to that employed in instances of accumulation of epidermis in the meatus externus. The use of a syringe and warm water is usually sufficient to loosen and bring away the mass. Should it not be so, a few drops of water or soap and water dropped into the meatus for a day or two will loosen the mass and allow of its easy removal. As a general rule, the symptoms of deafness and discomfort in the head wholly disappear upon the removal of the collection.

2. *The Dermoid Layer.*—The dermoid layer of the membrana tympani, like the dermis of the meatus, is subject to acute and chronic inflammation and to ulceration. On account of the intimate relations existing between the dermoid and fibrous layers of the membrana tympani, it is of great importance to put a stop to these affections of the dermis, as they are apt to be prolonged to the deeper seated layers of the organ.

Acute Inflammation of the Dermis.—Acute inflammation of the dermis usually occurs in debilitated subjects; it is usually produced by the application of cold, of cold water, or of any foreign body to the surface. The exciting causes are the sudden exposure to cold air after being in a warm room, or the introduction of cold water into the ear during bathing. It also often arises from the extension of inflammation from the dermis covering the meatus. The symptoms of acute inflammation of the dermoid layer of the membrana tympani are pain, though not of an aggravated character, at the bottom of the meatus, aggravated by coughing, sneezing, and sometimes upon swallowing, also not unfrequently an itching with

slight dulness of hearing. Upon examination the outer surface of the membrana tympani is seen to be dull, the dermoid layer opaque, and its blood-vessels distended with blood. All the vessels bordering upon the malleus are very much larger than natural, and they frequently form two red lines, one running on each side of the long process of the malleus. After a few days a discharge of mucus often takes place. If this affection be left unsubdued it is apt to advance to ulceration, and the fibrous layers are also liable to be destroyed.

Treatment.—The treatment is very similar to that for acute inflammation of the dermoid meatus. One or more leeches should be applied to the margin of the orifice of the meatus, warm water should be syringed into it thrice or oftener daily, hot fomentations used all around the ear, and, if requisite, aperient medicines and calomel administered. Most usually the inflammation succumbs to this treatment, and the fibrous laminae are uninjured. The inflammation usually subsides without discharge; sometimes a small quantity issues from the surface of the membrane.

CASES.

Acute Inflammation of the Dermoid Layer of the Membrana Tympani.—G. W., Esq., aged 60, consulted me on February 15, 1853, on account of pain in his right ear.

History.—Without any assignable cause, slight pain occurred in the right ear several days since, and it has remained till now, being aggravated at times. It is increased during the act of coughing, and slightly when swallowing. A sensation of fulness is also complained of. Upon examination the dermoid layer of each membrana tympani was observed to be more opaque than natural, and numerous blood-vessels, especially at the upper part, were observed to be distended with blood. There was but slight diminution in the power of hearing.

Treatment.—As the pain was not very severe, the ear was ordered to be syringed out with warm water twice daily, and a linseed-meal poultice to be applied over the ear at night; a stimulating liniment was rubbed at the back of the ear. The pain gradually disappeared, and the membrane returned to its natural state.

Acute Inflammation of the Dermoid Layer of the Membrana Tympani.—B. S., Esq., a medical man, aged 48, saw me in February, 1852.

History of Case.—When a student, twenty-six years previously, he had an attack of cold, and became suddenly deaf in both ears, but recovered in the course of two months. Sixteen years since had an attack of vertigo, and suddenly lost the use of the left ear; the hearing partially returned, but still remains dull. A fortnight previous to consulting me he had a relaxation of the throat, and an uncomfortable feeling in the left ear, after which he became dull of hearing; but the sound of his own voice was very loud, like thunder. On examination the membrana tympani was observed to be swollen and much more red than natural; its blood-vessels were large and distended. The watch was heard at a distance of two feet.

Treatment.—Slight counter-irritation was kept up behind the ear for ten days; and a cooling lotion applied to the meatus: the patient quite recovered at the end of that time.

Acute Inflammation of the Dermoid Layer of the Membrana Tympani; Discharge of viscid mucus; Cure.—Master S., aged 3, was brought to me by his father, a Physician in London, on the 19th of April, 1853.

History of Case.—A few days previously, when not feeling very well, complained of slight pain in each ear; this remained for two days, and was then followed by a discharge of mucus, and slight dulness of hearing. These symptoms have remained until the present time.

On examination, each external meatus was observed to be partially full of matter, which when removed by the syringe was found to be composed of masses of mucus, similar in their character to those which issue from the meatus in cases of acute inflammation of the dermis. They were more flocculent and whiter, and not so elongated as the masses of secretion from the mucous membrane of the tympanum. After the meatus had been cleansed, the outer surface of the membrana tympani was seen to be of a deep red colour, and projecting outwards into the cavity of the meatus. Upon minute examination this red appearance was found to depend upon the tumefaction of the dermoid layer of the membrane, which was denuded of epidermis, the processus brevis of the malleus

being observed at the uppermost part. There was considerable dulness of hearing.

Treatment.—A leech was ordered to be applied to the margin of the orifice of each meatus, and hot poultices to be kept over the ears. By these means the pain was subdued, and the inflammatory symptoms diminished; and, in the course of three days, a small portion of vesicating paper was applied behind each ear. By degrees the power of hearing returned, the discharge disappeared, and the dermoid membrane regained its natural appearance.

Acute Inflammation of the Dermoid Layer; Secretion of Mucus.—A. Moorman, aged 58, was admitted under my care at the St. George's and St. James's Dispensary, on May 24, 1850.

History of Case.—During the last five months has been out of health, feeling much debilitated. About seven weeks previous to seeing me, pain suddenly attacked the right ear; this was followed by a "steaming and hissing sound;" after this had remained for three weeks the ear began to discharge. This discharge has remained until the present time, accompanied by considerable itching in the ear, and by a sensation as of something grinding within it. Upon examination, the watch was only heard when in contact with the ear: the dermoid layer of the membrana tympani was observed to be flat, red, and very much swollen; there was a watery discharge, consisting principally of epidermoid cells. The surface of the meatus was somewhat redder than natural.

Treatment.—The ear to be syringed out with warm water twice daily, and vesicating paper to be applied each night behind the ear.

May 31.—Better. The noise is less loud; the power of hearing is improved.

June 7.—Improves daily; the quantity of discharge is much diminished; the noises have disappeared, except in occasional attacks, which are of short duration. The membrana tympani is regaining its natural aspect.

CASES.

Simple Chronic Inflammation of the Dermoid Layer, with or without an Accumulation of Epidermis.

This affection is also commonly produced by cold, and it is of but little importance, excepting when it results in the secretion of large quantities of epidermis. A simple tumefaction of the dermoid layer is not usually productive of such a diminution of the hearing power as to cause the patient to apply for relief; in many instances where it has been hypertrophied, I have found the patient suffering no inconvenience. If, however, it becomes so much tumefied as to render the membrana tympani tense, then a perceptible deafness is induced. In the majority of cases of hypertrophy of the dermoid membrane there is co-existing a thickening of the mucous membrane of the tympanum, which causes the deafness. The presence of several layers of epidermis on the outside of the dermis is also a source of considerable deafness, and very frequently of uncomfortable sensations in the ear and head.

Simple Chronic Inflammation of the Dermoid Layer, with an Accumulation of Epidermis on its Surface.—Colonel T., aged 45, strong and in good health, consulted me on July 1, 1855, on account of a sensation of buzzing in both ears, especially in the right, which had existed for three months, accompanied by a feeling of oppression in the head, and dulness of hearing. Upon examination, the watch was heard only when in contact with the ear; a large quantity of epidermis was observed at the bottom of the meatus. By means of the syringe several layers were removed, and the surface of the dermis exposed, which was observed to be red and thick. The removal of the epidermis was attended by the disappearance of the noises and of the unpleasant sensation in the head, the hearing was much improved; the hearing distance with the watch being six inches.

Simple Chronic Inflammation and Hypertrophy of the Dermoid Layer.—R. I., Esq., aged 25, visited me on March 29, 1853, on account of dulness of hearing.

History.—Five years ago, after the removal of a large portion of cerumen by means of a scoop, had irritation in the ears, and remained deaf for some time afterwards. Three months since, when suffering from deafness, was relieved by the use of the syringe; lately the left ear has again become dull, and he has complained of pain in the left ear and side of the face. Upon examination, the watch was heard by the right ear at a distance of two inches, by the left at the dis-

tance of an inch. The dermoid layer of each membrana tympani was hypertrophied, and in the left ear it was also very red.

Treatment.—A slight discharge was kept up from the surface of each mastoid process, and a weak solution of nitrate of silver (gr. v. ad 3j.) was applied to the surface of the affected membrane.

April 9.—Hearing improved. The watch is heard with the right ear at a distance of three inches, and with the left at a distance of seven inches.

Chronic Catarrhal Inflammation of the Dermoid Layer.—Chronic catarrhal inflammation of the dermoid layer of the membrana tympani is far from being rare. Like the same disease of the dermoid layer of the meatus, it often occurs in children who are out of health, and it is also the result of the application of cold to the surface of the membrane. It also very frequently takes its origin in an attack of acute inflammation, which, instead of subsiding, becomes chronic. The discharge usually consists of the epidermoid cells, which are thrown off in conjunction with a quantity of fluid, instead of forming a distinct epidermoid layer. When the discharge is removed, the dermis is found to be swollen, and entirely denuded of epidermis; its surface is sometimes of a deep red colour, at others it is of a palish red. Cases of the disease under consideration require careful treatment, or they are apt to terminate in the formation of granulations on the surface of the membrane, of polypi, or in ulceration; by the latter process the fibrous laminae may become affected. This affection is not unfrequently associated with a corresponding affection of the dermoid layer of the meatus, but when the latter has been overcome, the disease in the membrana tympani is apt to continue.

CASES.

Chronic Catarrhal Inflammation of the Dermoid Layer, with thickening of the Mucous Membrane of the Tympanum.—Rev. W. A. æt. 32, visited me on November 18, 1854.

History.—Since a child the left ear has been useless. During the past year the right ear has been dull of hearing at times, and he has complained of irritation of the ear, for which he has been in the habit of picking it with an ear-pick. Lately he has become more deaf, so that he requires to be spoken to loud within a yard of the head, and he has complained of a discharge from the right ear. Upon examination the dermis of the meatus in the right ear was observed to be red, and the dermoid layer of the membrana tympani was red in some parts and white in others; there was an abundant discharge of mucus.

Treatment.—The ear was ordered to be syringed out with warm water thrice daily, three leeches to be applied to the orifice of the meatus, and vesicating paper to be kept behind the ear.

Nov. 26.—Much better; thinks that he now hears as well as he has done for some years. The dermoid layer of the membrana tympani is less red; the discharge is less abundant.

Catarrhal Inflammation of the Dermoid Layer after bathing.—Miss J. G. æt. 27, consulted me on Sept. 15, 1855, on account of a dulness of hearing in the left ear, attended by discharge.

History.—A year previously, immediately after bathing in the sea, felt a slight pain in the left ear, which remained for three or four days, and was then followed by a discharge, which has remained until now, accompanied by a dulness of hearing. Upon examination the surface of the dermoid layer of the membrana tympani was found to be covered by discharge, and after its removal it was seen to be red and its blood-vessels distended. The same treatment was pursued in this case as in the last, and the patient was cured in two months.

Catarrhal Inflammation of the Dermoid Layer after Measles, Polypoid Growth from the Surface.—Miss M. E. S., aged 10, not strong, was brought to me on April 2, 1853.

History.—Three years previously had an attack of measles, which was followed by discharge from the left ear, and considerable dulness of hearing in both. Eight months ago had an attack of low fever, which remained for two or three months, and which much increased the deafness. At the present time he requires to be spoken to distinctly within a yard of the right ear. Each night there is discharge, and a certain amount of ear-ache. Is better in warm weather.

On examination, in the right ear there was found a con-

siderable quantity of discharge, which being removed the dermoid layer was observed to be much hypertrophied, and red growths covered considerable portions of it, especially posteriorly. The hearing distance was four inches.

Left Ear.—Membrana tympani white at the upper part, and the dermis much thickened; discharge abundant; hearing distance half-an-inch.

Treatment.—A solution of chloride of zinc, two grains to the ounce, was injected into each ear twice daily, and a discharge was kept up from the surface of the mastoid process. Under this treatment the discharge disappeared, and the power of hearing was much improved.

Catarrhal Inflammation of the Dermoid Layer following Measles.—Master M. N., aged 6, pale, thin, and of a scrofulous diathesis, was brought to me on the 12th of May, 1851, on account of a discharge from the right ear.

History.—Since an infant has been subject to attacks of ear-ache; five months previously had an attack of measles, which was followed by a discharge from the right ear, which at times much diminished, but has never wholly disappeared. No dulness of hearing has been perceived.

Upon examination the hearing distance of the right ear was found to be reduced to four inches; the meatus contained a considerable quantity of offensive discharge; the outer surface of the membrana tympani was flat; the dermis was white, and much thickened.

Treatment.—Tonic medicines were administered; the ear was ordered to be syringed out with half a pint of tepid water thrice daily, and afterwards with a solution of tannin, three grains to the ounce. A stimulating liniment was rubbed over the mastoid process daily. This plan of treatment, pursued for two months, removed the discharge, diminished the hypertrophy of the membrane, and improved the power of hearing. This patient was brought to me three or four times subsequently, suffering from a recurrence of the attack, but it always yielded to similar treatment.

(To be continued.)

ORIGINAL COMMUNICATIONS.

JERSEY HOSPITAL REPORTS.

By G. M. JONES, Esq.

STRICTURE OF THE URETHRA.

PERINEAL SECTION AFTER THE BLADDER HAD ON THREE DIFFERENT OCCASIONS BEEN PUNCTURED, AND INFILTRATION OF URINE HAD OCCURRED ONCE—RECOVERY.

THE remarks in the last *Medical Times and Gazette* respecting a case in which perineal section was resorted to four years ago, inclined me to refer to my notes of one in some respects analogous; I shall, therefore, and as concisely as I can, give its history, believing that it may be interesting to those who advocate the operation.

Clement Pinel, aged 35, a road-labourer, was admitted into the Hospital on the 26th November, 1843. For two or more years he had at times experienced considerable pain during micturition, and had several times suffered from retention of urine for three or four hours together. On this occasion upwards of thirty hours had elapsed since the bladder emptied itself. When I saw him his sufferings were extreme. An attempt was at once made to introduce a catheter (this had before been tried by another surgeon), but without success. The warm bath, bleeding, and other means usually employed in similar cases, having failed to procure the wished-for relief, and as the impending danger from the urgent retention of urine demanded immediate surgical interference, I at once punctured the bladder above the pubes, as the only means left me to benefit the sufferer. Everything went on most favourably as far as regarded the operation; small bougies were daily introduced, and with every prospect that a diligent continuance of the same means might effect a cure. The patient, unwilling to subject himself to further treatment, left the hospital on the 11th December. On the 28th March, 1844, he again became an inmate, and for the same complaint. The retention had now lasted thirty-six hours. The same remedies as on the former occasion were tried; the same result followed, so the bladder was again punctured. The patient, after withdrawing the canula, left on the 30th, (forty-two hours after

the operation,) and walked to his home, a distance of six miles. On the 5th of June, 1848, I was again summoned to see him. I found the urethra in a high state of irritation, and bleeding freely. Fruitless attempts had been made some hours before to relieve his sufferings. Here, again, all treatment and remedies failed, and the bladder was punctured for the third time. He remained in Hospital till the 30th, during which time especial attention was paid to the stricture, and larger bougies were introduced than when he first submitted to this mode of treatment. I lost sight of this patient from the time he left the Hospital till the 26th June, 1852, when he was again admitted into the establishment. On that day, and for many afterwards, his case seemed almost hopeless; his old complaint had returned some seventy hours before. Infiltration of urine existed, and the entire scrotum assumed a gangrenous character, as also the lower part of the abdomen, under its loose fascia. There also existed an immense amount of constitutional disturbance. It was impossible to reach the bladder by the natural passage; free and deep incisions were at once made, and so far with benefit that the immediate danger was overcome. During the many critical days which followed, a very large quantity of stimuli was taken; almost the entire scrotum and much of the perineum sloughed. The cicatrization was at first slow, but afterwards progressed most rapidly.

This unfortunate patient, however, as on former occasions, left the Hospital on some frivolous pretext before the wound had entirely healed, or the means employed in similar dangerous cases had been fully carried out. Late in the afternoon of the 5th of November, 1853, he again experienced retention of urine, and was conveyed to the Hospital the following evening. His sufferings were to all appearance greater than I had seen him experience on other occasions; he felt as if the bladder must burst; there was a little dripping of urine, but not more than is found in such cases. Knowing how fruitless my attempts had been, I was satisfied with less energetic means than I had used heretofore, and determined to see whether the perineal section might not prove more successful than my other endeavours had done. The operation was performed in the following manner:—the patient, under the influence of chloroform, was secured as for lithotomy. A small staff, grooved to the end, was introduced down to the stricture, the scalpel was then thrust into it about a quarter of an inch above its extremity, and carried downwards for some way through the integumental strictures; a director, very small at its end, was then placed in the groove of the staff, and while gently pressed downwards so as to penetrate by degrees through the stricture, a small sharp-pointed bistoury was made to follow in its track until the obstruction was not only entirely laid open, but also an equal length of the urethra below the stricture as had been divided above. A hollow gum catheter was now introduced with the right hand, while the fore-finger of the left, kept in the wound, piloted it into the bladder. Water dressing was employed, a strong anodyne given, and the same treatment followed as in a case of lithotomy. No untoward symptom occurred. In seven weeks the wound had completely cicatrised, and the urine passed through the natural passage in a full stream. A bougie was for some time introduced daily, then three or four times a week, and the patient was discharged the following March perfectly cured.

On the 2nd of August, 1856, he was admitted into Hospital for rheumatism; on the 16th he left sufficiently well to resume his employment. On the 10th of September he was brought in, labouring under a most severe attack of acute anasarca; discharged "well" on the 10th of October. On the 28th of the same month he re-entered the establishment in consequence of bronchitis. He is still an inmate (Feb. 3d, 1857), but nearly well.

It is now *three years and a quarter* since perineal section was performed; from that time to the present he has never once felt the slightest pain or the least inconvenience in passing urine. A large bougie or catheter can be passed with the greatest ease, and when asked by those who may formerly have witnessed his sufferings, "how he now finds himself," he replies, "that while almost every part of his body at times pains him, his bladder is the part in which he never experiences an ache."

Remarks.—In reporting this case I have endeavoured to be as concise as a connected history of it would allow, and have, therefore, only touched on its most salient features, avoiding

details and minutiae as much as possible. It certainly presents many points of interest, and its result up to the present time offers an argument in favour of the perineal section in cases of stricture, which the opponents of this operation will find it difficult to overthrow. I am quite willing to admit that the operation performed on the 6th of November, 1853, might have been resorted to ten years before, and, at all events, ought to have superseded that of again puncturing the bladder in 1844. My bad surgery, or want of judgment, has, however, shown the curative tenacity, if such an expression may be employed, which is occasionally, as it were, inherent in some persons. We have patients under our care, always alive to every precaution, and attentive to our every direction, who succumb from slight causes; while others seem to thrive and their ailments vanish, though nurtured in the very hotbed of incaution, impurity, and vice. This patient is a striking illustration. The first seeds of his disease can be traced to his early dissolute habits; the last affection, for which he is now in the Hospital, and those others from which he has suffered so severely, were either the fruits of dissipation or perfect recklessness. His home, the squalid abode of wretchedness, afforded him scarcely more shelter than the open fields, in which he has been known to lie during winter nights, some days with scarcely a morsel to eat, at other times living for days together on drink alone; at one time a road-labourer, at another a fisherman; never settled to one spot, or to one way of gaining his livelihood. Such is the history of the man who, in ten years, had five operations performed on him;—the bladder punctured three times (a), a procedure "always attended with great danger from infiltration, which it is so difficult to guard against, or from peritoneal inflammation, which so frequently occurs" (b): on one occasion, removing the canula a few hours after its introduction, and then walking a distance of many miles, and that without suffering from infiltration of urine: once the subject of extravasation, followed by all its dangerous concomitants: and then quickly recovering from an affection in which "such examples are few, in proportion to the numerous instances where death is the result" (c): and lastly, we find this same patient a living proof of the efficacy of the perineal section, perfectly cured of an intolerable stricture, which had for years together been the torment of his life.

My experience of the knife in stricture of the urethra is much too limited for me to venture anything like a positive opinion on the advantages or demerits of the perineal section. The case I have dwelt on, if it can be regarded as a test (and what more than a perfect recovery can be required to establish it as such?) must go far to prove it positively useful, and, I may perhaps add, a permanent mode of cure; but in employing the latter expression I do so under certain reservation. No Surgeon does, or, at all events, ought to, discharge a patient on whom he has performed an operation of moment, without giving him certain rules for his future guidance, let the nature of the case be what it may; and so it is after the operation in question. We dismiss our patient as cured; but unless he follows the same precautionary measures which hundreds are told to pursue, and do pursue, whose stricture has been cured by the means most ordinarily employed—that of having every now and then a bougie introduced, surely it is unfair to denounce the good effects of an operation which very probably might have continued lasting, had the recommendations laid down been regularly and properly attended to; it shows an ungenerous spirit to blame the operation, and not the neglect. It is true, my patient remained well for three years without further interference; but this is no argument, in proof of which I have on three or four occasions employed the catheter during the periods he has been in Hospital. Some eighteen years ago I operated on rather an aged female for strangulated hernia; the patient recovered, but no persuasion could induce her to wear a truss: two years after, the operation had again to be performed for the same kind of hernia, and on the same side. The case was fatal. Were the means employed on the first occasion, or the obstinacy of the patient, to be blamed for the recurrence of the malady? That which holds good in one case is frequently applicable to another.

Mr. Liston states, in his valuable work on Surgery, that

(a) The bladder on each occasion was punctured above the pubes; the first time in consequence of my not having the rectum-trocar at hand, and the two following through choice; the result of the first operation having been so successful.

(b) Liston's Surgery.

(c) Fergusson's Practical Surgery.

during the series of years he filled the office of House-Surgeon at the Edinburgh Infirmary, the operation of puncturing the bladder had never been performed, and that it had only been resorted to once at University College Hospital, and that before his time. This, with Professor Symes' declaration, that there is no such thing as an impenetrable stricture of the urethra, would lead to the belief that retention of urine from stricture may be relieved without the aid of the knife. Possibly so; but we must bear in mind, "exceptions make a rule," and though it is probable that in such able hands the obstacle in my case might have been surmounted, it is certain that neither myself, whose opportunities have been great, or such of my friends as made the attempt, were able to introduce the catheter. But without wishing to bring my patient forward as an example, I consider the observations made by Mr. Fergusson on this point perfectly correct, and such as ought to be kept in mind: he says, "There are few surgeons who maintain that they never fail in introducing a catheter, and it is certain that the most expert operators have failed to pass instruments, when there has been positive proof at the time, by the dribbling of the water, that the canal has been in some degree permeable." To say that there never exists an insurmountable obstacle to its introduction, may lead to dangerous consequences, by inducing some surgeons to persist in efforts which may produce false passages and lacerate the parts; whereas a contrary opinion tends to a more cautious line of practice, and to better results. Some are not to be thwarted; and I have met with such, who, anxious to become imitators of a high authority, persevere without calling to their aid that amount of judgment, which might tell them how far they ought to proceed, and when it is time to desist.

I cannot conclude these remarks without observing, that the Profession at large is deeply indebted to Mr. Syme, on account of the able manner in which he has, "through good report and evil report," not only brought into notice his operation, but, by maintaining its efficacy, has been the means of alleviating the sufferings of humanity, and has led to a bolder line of practice in this department of Surgery than had been previously pursued.

CASES OF STERILITY DEPENDENT ON DYSMENORRHOEA AND DISEASES OF THE RECTUM.

By J. BAKER BROWN, F.R.C.S.

Surgeon-Accoucheur to St. Mary's Hospital.

I believe it is not generally known that diseases of the rectum are productive of sterility; but practical experience and observations have proved to me that they are so, and I have seen not a few cases which show that by removing diseases of the lower bowel we often remove the cause of sterility. But first I will speak of dysmenorrhœa as a cause of sterility. It is a derangement which may be either mechanical or spasmodic, and numerous expedients have been resorted to for its cure; such are catheterism, eaustics, cutting, sponge-tents, and similar mechanical contrivances; the object being to overcome stricture of the os and cervix uteri. I could adduce several instances where the protracted use of the metallic bougies, or of ordinary elastic bougies, has been successful, but two cases will suffice.

Case 1.—Stricture of the Cervix Uteri.—Mrs. F., married at the age of 27, had always suffered from dysmenorrhœa, for which she consulted me three years after marriage. On examination I found it impossible to introduce a uterine sound, on account of the firm constriction of the cervix uteri. Having first enforced a separate bed, I commenced the treatment of the case by passing the smallest size male elastic bougie—one of the firmer sort. Having succeeded in this, I gradually increased the size, and, after three months' perseverance, was able to pass one of Simpson's large uterine dilators. The result of this treatment was the complete cure of the dysmenorrhœa, and in a short time afterwards this lady became pregnant, and at the full period was delivered of a healthy child.

I have only to remark, that had I possessed at this period the set of dilators I have now the honour to present to the notice of the Society, a favourable result would have accrued in a much shorter period, and have involved less discomfort and difficulty both on the surgeon and patient.

Case 2.—Stricture of Cervix Uteri, with Displacement.—Mrs. C., a lady from Scotland, consulted me in the early part of 1856, on account of the following conditions:—she was then 31, now married for the second time, and had never borne children, although she believed that about a year after her first marriage she had a miscarriage. She suffered considerable pain at every menstrual period. On examination I discovered a reflection of the os and cervix, and on attempting to pass the uterine sound, I found a stricture not to be overcome. However, I commenced treatment by using small elastic bougies and catheters, and was at length able to dilate the strictured parts. On each occasion of its introduction the instrument was allowed to remain as long as it could be borne without discomfort. Two months' steady perseverance effected such a change, that I was enabled to pass a full-sized dilator.

The painful menstruation ceased, and the reflection of the uterus was completely cured. After her return home I was informed she was in the family way, and a few weeks since heard of her having been confined.

It was this case especially that induced me more particularly to devise some instrument more effectual for the object in view; and seeing the excellent system of Mr. T. Wakley for dilating urethral strictures, the idea occurred to me a similar application to contracted states of the neck of the womb.

Let me now call your attention to the set of instruments which I have contrived to dilate the os and cervix uteri, where this operation is called for. It will be seen I have made use of the admirable suggestions of Mr. Thomas Wakley, who has devised and carried out a tubular system as applied to stricture of the urethra with remarkable success. I have a sort of long stiletto, which I introduce into the os uteri through the speculum, as in the ordinary mode of passing Simpson's uterine sound, and then over this I pass the smallest sized elastic tube, and allow it to remain for a longer or shorter period, according to the pain produced. It will be found that cases which present almost insuperable difficulties to their dilatation readily yield under this simple contrivance, and without producing any bleeding or laceration, the not unfrequent result of ordinary dilatation. The most advantageous period for the introduction of the instrument is immediately after the secession of the catamenia, before contraction of the canal has taken place, and it has returned to its usual size.

I would wish to observe here, that I have never seen the necessity for the introduction of caustics into the cervix for the purpose of dilatation; and I think that no one who has studied the delicate structure of the lining membrane of the uterine cervical canal, and who recollects the necessity for its expansion and contraction at each menstrual epoch, would ever be induced to destroy any portion of it by such means. I may also incidentally observe, that I have had many cases come under my notice where partial occlusion of the os and cervix has been the result of their use; and I feel quite certain that the use of such agents is a more frequent cause of sterility than is generally supposed.

I shall now proceed to speak more fully of a series of causes of sterility, which, as before said, have not been previously recognised, viz., diseases of the rectum. Let me first recall to your minds the general law of the animal economy, "That any irregularity or interference with the functional action of any one part of the body affects more or less the whole body." If this law pertain to the body generally, how much more must it obtain between the female organs of generation, where the slightest deviation from normal functional action must materially interfere with the delicate physiological process of impregnation, and the contiguous organs. We must bear in mind that both the rectum and uterus are supplied with blood from the internal iliac artery, and with nervous influence from the sacral plexus, and that, therefore, disease or functional derangement in the one part or organ must interfere with the other. This I desire to illustrate in the following manner:—A female is suffering from bleeding hæmorrhoids. At the menstrual epoch there is an increased supply to the hæmorrhoidal vessels; and, consequently, a diminished supply to

the uterus, because nature only sends down a sufficient supply for the uterine function. The mucous membrane of the uterus will not, therefore, in this case undergo those normal changes which are necessary for the reception of the impregnated ovum. The same observations apply to prolapsus ani, where there is always some loss of blood at every time of defecation, and a greater loss at the period of the menstrual epoch. I could illustrate this with many cases, but one will suffice:—

Sterility from Prolapsus Ani.—Mrs. H., aged 33, married ten years, without family, consulted me on account of prolapsus of the bowel at every act of defecation, accompanied by loss of blood. The general health had greatly suffered. Upon questioning her, she confessed that during married life the catamenia had been scanty, thin, and light in colour; but that during the menstrual period much blood was lost from the bowel. The affection of the bowel, I pointed out, was readily curable; and, as there was no uterine disease to be detected, that the state of the bowel was the probable cause of her having had no family.

After preparatory regimen and medicine I proceeded to operate a week after the menstrual epoch. The bowels having been previously freely opened, I applied three separate ligatures to the prolapsed mucous membrane, and returned the tied parts within the sphincter. Opiates were freely given, and continued for a week so as to keep the bowels confined, and she was placed on generous diet, with wine. This patient progressed most favourably, the bowel was completely relieved, and at the next catamenial period, the uterine discharge was much augmented both in quantity and colour. Tonics and good diet were persevered with, and she lived apart from her husband for two months. Soon after this period she became pregnant, and advanced to the full period, and was delivered of a fine healthy child.

If a patient is suffering from fistula or fissure there is constantly more or less pain in the uterus as a result of reflex action; and, consequently, it is always under a state of irritation which renders it unfit for the quiet and perfect performance of its duties. Indeed, I have seen many case, which I shall mention on a future occasion, of patients having been treated for months and years for uterine inflammation with leeches, caustics, &c., where I have discovered a long-standing fissure of the bowel, which has been the sole exciting cause of the uterine affection. I shall here give a case.

Fissure of the Rectum.—Mrs. M., aged 26, married three years, without children, consulted me and made the following statement. Ever since her marriage, she had suffered from more or less pain about the womb, not acute, but of a dull, wearing kind. Catamenia were regular both as to time and quantity, and she suffered very slightly from leucorrhœa; had no pain on sexual intercourse, but felt generally ill, and suffered from dyspepsia. An examination per vaginam satisfied me there was no disease of the uterine organs. On further inquiry, she told me she suffered constant pain at stool, and frequently passed a small quantity of blood; a local examination showed me a deep and long-standing fissure of the rectum, which, to my mind, explained all her symptoms, and was the probable cause of her sterility. After preparatory treatment, I accordingly operated in the usual way by dividing the fissure. The after treatment consisted in placing her under the operation of opium, giving her at once 2 grains, and every 4 hours after, 1 grain, for the first 24 hours, then for the next day one grain every six hours, and for the next week a grain night and morning; my object and principle being not only to secure perfect quiet for the bowel, but to obviate all pain. With this treatment was conjoined generous diet, and, according to rule, the recumbent posture was insisted on, until the parts were well healed; at the end of nine days the bowels were opened by repeated injections of tepid water. This plan of confining the bowels after operations about the rectum and perinæum, the use of generous diet and wine, and the subsequent administration of enemata, has received a full consideration, both in some papers I have had the honour of reading before the Medical Society, and in my work on the treatment of some important surgical diseases of women.

From the foregoing observations it will readily be seen that ascariæ in the rectum, or any irregularity or disease of that bowel, must necessarily be a frequent cause of sterility. It is very gratifying, however, to know that when once the mind has been drawn to this fact, the cases become more simple and among the most readily cured.

GLANDULAR TUMOUR IN THE ORBIT.

By W. S. SAVORY, M.B.

Surgeon to the Royal General Dispensary.

THE following case of glandular tumour in the orbit is perhaps worth recording, for it attained a very unusual size in connexion with a gland which is seldom the seat of this or of any disease.

J., aged 78, a tall, spare man, became a patient at the Royal General Dispensary, in June, 1854. He applied for advice on account of the condition of his left eye. He said it was inflamed and painful. The portion of conjunctiva between the cornea and outer canthus was unnaturally vascular and much swollen. The corresponding part under the upper lid was also slightly affected. It resembled a case of simple inflammation of the conjunctiva with chemosis. Considering his age he was not infirm, and made no complaint of the state of his general health. The usual remedies were employed, but the mischief did not subside. In the course of a week or so the swelling of the upper lid increased, and now, upon careful examination, an unnatural fulness could be detected behind it between the globe and the roof of the orbit. In a week or two more, the condition of the conjunctiva being but little altered, this became gradually developed into a distinct mass, which could be plainly discerned distending the lid and pushing the inflamed and thickened membrane before it. It could also be distinctly felt between the globe and orbit, but its limits posteriorly could not be defined. At this period there was a constant discharge of a thin and clear fluid, which the old man complained of as the most distressing symptom. As the tumour increased it projected forward beyond the orbit and globe, and at the same time encroached upon the latter so as to press it downwards. The thickened conjunctiva also gradually intruded upon the cornea. For a long time the health appeared to be but little affected, and the pain was easily controlled by morphia. The tumour slowly grew, distending the conjunctiva before it and pressing upon the globe, so that for a few weeks before his death it protruded from the orbit as a mass the size of a small egg. At last only a very small portion of the cornea remained visible, and this became opaque. The rest of the globe was entirely concealed. As the tumour enlarged and compressed the eyeball the sight declined. His death, which occurred in December last, two years and a half after his first application to the Dispensary, could scarcely be regarded as directly due to the tumour. It seemed rather the result of exhaustion attendant upon old age.

Post-mortem.—The head only was examined. The brain and all the structures in the immediate vicinity of the orbit were healthy. The lids and conjunctiva were easily dissected off the front of the tumour: the latter was thickened and condensed, not otherwise altered. The roof of the orbit was removed, and its contents were dissected out. The mass consisted almost entirely of the tumour. Nearly in the centre the shrunken and flaccid globe was imbedded. The atrophied muscles of the eyeball could still be traced. The globe and the optic nerve were easily separated from the tumour; the latter was considerably elongated. No portion of the lacrymal gland could be distinguished from the tumour. It was of an uniform structure throughout; soft, somewhat elastic, easily torn with the needle, and the separated portions readily broke up and mingled with water. When the cut surface was scraped, a thick, white opaque fluid appeared. The tumour was composed almost entirely of gland cells and nuclei. Several portions of it were examined, and exhibited little else than clusters of gland cells, which were broken up at once by the gentlest manipulation. They were remarkably uniform in size and shape. It was very difficult to distinguish anything like a lobular arrangement, and scarcely a trace of connective tissue could be discerned. The tumour measured three inches in length and two inches in breadth and depth.

It may possibly be asked why this tumour was not removed during life. The man suffered so little and was so advanced in years that the question was never fairly raised; but even if the symptoms had been far more severe, I should probably have declined to interfere, for I was wholly ignorant of its nature, and it was believed by many to be malignant, and to extend beyond the orbit into the cranium.

CASE OF ABSCESS OF THE BRAIN.

By J. M. GRANT, M.D.

Surgeon, 54th Regiment.

I THINK that the following case of abscess in the brain, which has lately come under my notice, may be interesting to some of the readers of the *Medical Times and Gazette*.

Private ———, 54th Regiment, was brought to the Regimental Hospital on the morning of the 19th instant, complaining of headache, and of feeling generally unwell. As he did not feel able to march from the barracks to the hospital, a distance of about a quarter of a mile, he was carried in the sick van.

On presenting himself to me his gait was unsteady, his eye dull, and his countenance inexpressive; in fact, he had all the appearance of a person only partially recovered from a fit of intoxication.

He complained of pain in the head, which he said he had had for four, or five days, and his tongue was dry, and covered with a brown fur. I ordered him a brisk purgative, and desired him to be kept under observation for the day. He remained very unwell, and towards evening he became feverish, and complained of a creeping, cold sensation, while the pain in his head was unabated. He was therefore admitted, and placed under treatment for continued fever.

December 20th.—Bowels were not freely moved by the purgative administered yesterday. Tongue dry, and covered with a brown fur. Complaints of pain in the front part of his head, thirsty, pulse quick, but feeble. Has the same listless, inexpressive look as yesterday, and his eyes are suffused. To have a calomel and jalap bolus, and saline, and effervescing draughts.

21st.—As reported yesterday. Tongue less loaded, and moist. Bowels were freely opened. To continue mixture and draughts.

22nd.—Great pain in the head. Passed a very restless night. Continue mixture, &c., and apply a blister to the nape of the neck.

23rd.—Very low. Spent a very restless night, moaning and muttering incoherently; pulse very feeble; cannot be readily roused. Pills ordered every three hours, containing two grains of blue pill, and 5 grains ammon. sesquicarb.

24th.—Extremely weak, pulse feeble, and intermittent. Is lethargic, and makes no complaint—restless, and muttering incoherently; cannot take the pills. To have a little wine and strong soup from time to time.

25th.—As last reported—appears moribund. Towards the evening of this day he had subsultus tendinum and jactitation, and he died at half-past eleven o'clock, p.m.

Secutio cadaveris, twelve hours after death.—Body muscular, and not the least emaciated. Abdominal and thoracic viscera healthy.

In the anterior part of the right hemisphere of the brain was found a large abscess, from which, to speak quite within bounds, one ounce of thick purulent matter escaped. The walls of this abscess were formed posteriorly and laterally by the cerebral substance, which was hollowed by loss of substance sufficiently to receive a large pigeon's egg, and anteriorly by the dura mater. There was no trace or appearance of any injury to the bone. On the cerebral walls of the abscess, coagulated lymph was effused, just as in an abscess occurring in any other part of the body.

I have been unable to trace the disease to any accident, or peculiarity in the man's habits. It appeared from his own statement that he suffered no pain until four or five days before he applied for relief, although serious organic mischief must have been going on long before that time. There was no appearance of injury, as I have already said, and the brain presented a healthy appearance and structure, except at the circumscribed seat of disease.

Military Hospital, Devonport.

MURDER OF A DENTIST IN NEW YORK.—The victim was Dr. Harvey Burdell, a well-known dentist, who was found dead in his room, his body being pierced with fifteen wounds, and his neck showing evidence of strangulation. The motive for the murder does not appear to have been plunder, as none of the property of the deceased was taken or his papers disarranged.

THE LONDON
PRACTICE OF MEDICINE AND SURGERY.

STATISTICAL REPORT OF THE PRINCIPAL
OPERATIONS

PERFORMED DURING THE LAST THREE MONTHS OF 1856.

(Concluded from page 167.)

EXCISION OF THE CERVIX UTERI.

Case 1.—Guy's: Dr. Oldham.—A woman, of middle age, under care on account of a growth of fungating medullary cancer from the anterior lip of the uterus. As the disease was quite superficial, the organ movable, and the glands unaffected, Dr. Oldham determined on its excision. The operation was performed by Mr. Cooper Forster. No material hæmorrhage attended it, and the patient did remarkably well afterwards. The disease, however, appeared in a portion of the posterior lip of the cervix which was not excised within six weeks of the operation, and the patient is now in a hopeless state. *Case 2.*—The Metropolitan Free: Mr. Hutchinson.—A woman, aged 52, from whom both lips of the uterus had been excised six months previously, on account of fungating medullary cancer. The patient had enjoyed good health for five months as the result of the first operation, and the disease having re-appeared she submitted most willingly to a second one. The whole cicatrix and a considerable part of the cervix were removed, a conical portion being cut out. The parts again healed soundly, and up to the present time there are no indications of recurrence. (For details see report of Pathological Society for Nov. 15, page 502.)

TREATMENT OF ANEURISM BY COMPRESSION.

Case 1.—St. Thomas's: Mr. Solly.—A man, aged 34, admitted with an aneurism of the brachial artery, the size of a bantam's egg, and resulting from a gunshot injury near the bend of the elbow. Compression treatment has been kept up with some interruptions for four months by means of compressions on the subclavian and brachial trunks alternately. It is now all but solid, and much reduced in size.

Case 2.—St. Thomas's: Mr. McMurdo.—A man, aged 30, admitted with a large popliteal aneurism of uncertain duration. Compression treatment was tried from November 8 to December 11. At first it diminished in size, but subsequently it increased, became painful, and at length the sac burst into the calf. Ligature of the femoral was performed on Dec. 11. Gangrene followed, and amputation through the thigh was necessitated on the 13th. Death took place from pulmonary congestion, etc. on the 18th. See "Ligature of Arteries," "Amputations," etc.

OPERATIONS FOR CARIES OF BONE.

Guy's.—Mr. Cock.—A girl, aged 21, in very poor health, was admitted on account of caries of the right tarsus of sixteen months' duration. The parts were freely exposed, and the scaphoid, the cuboid, the thin cuneiform, and the anterior halves of the os calcis and astragalus were removed. The case progressed well afterwards, and the healing was almost complete. Some diseased bone, however, still remains, and the foot is so mis-shapen that amputation may not improbably be yet resorted to.

RESECTION OF PARTS OF THE SUPERIOR
MAXILLA.

Case 1.(a)—King's College: Mr. Fergusson.—A girl, aged 13, in good health, admitted on account of an osseous growth distending the left antrum. It had been observed to be increasing for three years. Excision of the greater part of the maxilla was performed, the cheek being dissected up by a single incision through the upper lip. In the osseous mass was one of the incisive teeth. She recovered well, and very little deformity resulted.

Case 2.—King's College: Mr. Fergusson.—A man, aged 34, admitted on account of a very large osteo-encephaloid growth in the left upper maxilla. It was of twelve months'

(a) Several of Mr. Fergusson's cases were omitted in the report for the previous quarter, and are included in the present one. Two of these occurred in June.

growth, and he was in much reduced health. An incision through the upper lip only was practised, the cheek dissected up, and the entire maxilla removed. Not much bleeding attended the operation. Death from a state resembling commencing pyæmia, on the fifth day. At the autopsy, pus was found in the glands and cellular tissue of the neck.

Case 3.—King's College: Mr. Fergusson.—A girl, aged 16, under care on account of an osseous growth involving the right upper maxilla and malar bone. The only external incision was through the upper lip. The whole maxilla and part of the malar bone were removed. Recovered well, and left the Hospital about a month afterwards.

Case 4.—King's College: Mr. Fergusson.—A girl, aged 10. The whole right upper maxilla was removed by the usual operation. The disease proved to be tuberculous deposit in the antrum and surrounding bone.

OPERATION FOR HYDROCELE WITH THICKENED
CYST.

The Metropolitan Free: Mr. Hutchinson.—A man, aged 23, was admitted on account of great enlargement of the right testis. It was the size of a fist, quite opaque, and so tense that fluctuation was doubled. It had formed very gradually, and been slowly increasing for four years. A trocar having been introduced, about four ounces of hydrocele fluid were withdrawn, but the thickness of the walls prevented them from collapsing much. A fortnight later the cavity of the tunica vaginalis was laid open, and its front wall dissected away, it being exceedingly dense and thick. The cavity was dressed with charpie and allowed to suppurate. The case did well, and the wound is soundly healed, some induration, however, still remaining.

THE CITY HOSPITAL FOR DISEASES OF
THE CHEST.

VICARIOUS HÆMOPTYSIS.

THE occurrence of vicarious hæmoptysis in females is usually devoid of serious import. It is nevertheless always the source of some anxiety to the medical attendant as well as the patient. If it occur regularly at the monthly periods and then only; if the patient be not known to have any proclivity to disease of the lungs; and above all, if there are no concomitant symptoms, whatever, of such disease; a very confident prognosis may be given. If however the reverse of these conditions, or of any of them exist, there is then cause for fear. The first of the two following cases will interest the practical physician on this account. The hæmoptysis was long continued; it was not confined to the menstrual periods, and it occurred to a girl who, although healthy, and even robust in appearance, had lost her father of phthisis. Vicarious hæmoptysis and epistaxis are both of them undoubtedly much more frequent than vicarious hæmoptysis, and much more free from doubt. It is easy to suppose, in cases of disturbed menstrual function, tending to the discharge of blood from other surfaces than that of the uterus, that the election of place would be somewhat influenced by structural endowments, and that an organ liable on its own account to congestions, &c., would be very likely to be selected. Thus hæmoptysis of vicarious character might be held pro tanto to imply some tendency to pulmonary disease. Viewed from this point it would have been exceedingly interesting to have known the final result of Dr. Bennett's case, which occurred more than three years ago. The patient did not again apply at the Hospital, and the writer has within the last month endeavoured to obtain information respecting her at the address she gave, but unfortunately without success.

The second case is one to which also the above observations will somewhat apply. Its chief interest is however on account of the very early age at which the menstruation, both natural and vicarious, happened.

Whilst on the subject, we may just advert to a case which came under the writer's notice four years ago, in the practice of Dr. Birkett, at the same Hospital, in which a young woman had a nævus the size of half a pea on the iris. At each menstrual period this little growth would bleed a few drops into the anterior chamber. The re-absorption occupied a few days, and thus the eye was rendered almost useless for one week out of every four.

EARLY MENSTRUATION—PROFUSE AND LONG-CONTINUED HÆMOPTYSIS IN CONNEXION WITH SCANTY MENSTRUAL FLOW.

(Under the care of Dr. RISDON BENNETT.)

Mary Ann L., aged 14, but having all the development of a girl of 17, stout, florid, and buxom, was admitted as an out-patient on December 20, 1852. She had spat blood occasionally for about two years, but latterly it had much increased, both in quantity and in frequency of occurrence. The colour of the blood was stated to have been sometimes florid and sometimes dark. Menstruation had commenced at 11½, and had been regular, but scanty, ever since. Dr. Bennett made a careful examination of the chest, but without detecting any signs of pulmonary disease. A course of tonics, with aloetic aperients, was ordered. From her admission in December the girl continued to attend regularly up to June 9, 1853, and her case attracted much attention. Until the last two months of this period the expectoration of bloody fluid continued. It occurred almost every day, and sometimes to the quantity of two or four ounces at a time. The fluid was bright and florid, but thin and watery, and on standing it did not coagulate. It was once examined under the microscope, and showed blood corpuscles in small number. Throughout this time menstruation continued to occur, but was always very scanty. During the flow the expectoration often continued unchecked. In March the fluid brought up ceased to be coloured, and coincidentally with this change the menses became much more free. Careful examinations of the chest were repeatedly made, but without detecting any positive signs of disease. Indeed the girl's appearance never at all suggested the idea of phthisis, as she remained florid, and with a certain degree of embonpoint. Her father having, however, died of phthisis, and her mother being very delicate, her friends were naturally very anxious about the continued hæmoptysis. Her cough was never very severe, and the blood was usually brought up without effort. It should be stated that the tonsils were somewhat enlarged. She had been liable at times to lose flesh considerably, and then regain it.

When discharged, in June, no hæmoptysis had occurred for several months, and the discharge at the menstrual periods was much more free than it had ever before been. She had gained flesh considerably, and, excepting a degree of lassitude, felt well.

Dr. Bennett had throughout the case regarded it as one of disorder of the menstrual function mainly, but with the family history, and the fact that the hæmoptysis had not been confined to the monthly periods, he had not been able to put aside all anxiety as to what it might possibly portend. The treatment adopted had consisted in the use of tonics, and remedies likely to excite the uterine functions (the biborate of soda, etc.); leeches had also been applied to the groins at the menstrual periods.

MENSTRUATION AT THE AGE OF EIGHT—VICARIOUS HÆMOPTYSIS.

(Under the care of Dr. EDWARDS.)

Jane S., aged 8, came under treatment as out-patient at the City of London Hospital for Diseases of the Chest, September 17, 1856. Is a well-nourished, intelligent child, of fair complexion. Face pale, with dark areola around the eyes; pulse 100, rather feeble; tongue clean and moist; bowels open daily; motions reported natural, without ascarides. For the last eight or nine months she has suffered from periodical attacks of hæmoptysis, coming on at monthly intervals, and lasting for about a fortnight. During these attacks she brings up every morning, without effort or cough, about a tablespoonful of bright, perfectly fluid blood, which does not coagulate after standing for some time. She has no cough, and makes no other complaint. There is no undue development of the mammary glands, or of any other part of the body.

Respiratory murmur good on both sides of the chest; heart sounds normal; percussion natural.

She is one of three children, two of whom are living, the other died of hydrocephalus.

When between five and six years old she had "a few fits," in which, her mother states, her face became livid and her limbs rigid, but not convulsed. With this exception, she was healthy up to 7, when her mother observed for the first time

a slight discharge of blood from the vagina, which stained her linen. This recurred at monthly intervals three or four times, and then ceased; the mother thinks, after the first attack of hæmoptysis.

Ordered—Acid. sulph. dil., mij. ; ex decoct. cinchonæ, ʒss. , ter die; ol. morrhuæ, ʒj. , ter die. Cold hip bathing, etc.

From this time she had no return of the hæmoptysis or the vaginal discharge, and continued to improve up to January, 1857, when she had an attack of scarlatina, from which, however, she perfectly recovered, and still remains quite well.

ST. BARTHOLOMEW'S HOSPITAL.

MORTIFICATION OF ONE FINGER FROM A CAT-BITE—ERYSIPELAS OF THE ARM—TETANUS—DEATH.

Under the care of Mr. LAWRENCE.

(Reported by Mr. CHIPPENDALE, House-Surgeon.)

S. R., aged 46, shoemaker, whose previous health had been good and habits temperate, was admitted into Rahere Ward on December 13th. He stated that six days ago he was severely bitten in the finger by a cat which, up to that time, had never exhibited any signs of ill-temper. He immediately placed the finger in warm water in order to encourage the bleeding, which was considerable, considering the small size of the wound. No caustic was at the time (or has been subsequently) applied. The same evening he felt very chilly and unwell, the pain in the wound being so severe as to quite prevent him from sleeping. This continued for three days, the part having become very inflamed, when he was relieved by an incision, which was followed by the escape of some pus. The following day the finger commenced to change colour, and its temperature and sensibility to diminish. He then applied to the Islington Dispensary, where some dead skin was removed by the Surgeon in attendance, who advised him to come to this Hospital for the purpose of having the finger at once amputated.

On admission the finger was seen to be shrivelled and black as far as the first phalanx, at which point the mortification had ceased, and a healthy line of separation established. The part was cold and moist, yet not totally deprived of sensation. The integuments covering the first joint and back of hand were very inflamed, and the whole limb was swollen and œdematous. Along the track of the cephalic vein there was a dusky tint, but no tenderness, the glands in the axilla were, however, slightly enlarged and painful. The man's countenance was anxious, his skin rather hot, pulse 108, moderate volume; tongue moist, but furred; urine not particularly coloured; he complained of great pain throughout the whole arm. Hirudines, xxiv. —Haust. Sodæ tartratis c. potassæ nitr., gr. x., 6tis.—Tinctura opii, m̄xl. vespere.

December 13th.—The leeches gave considerable relief to the back of the hand, but to-day there is a great increase of pain, swelling, and tension in the upper and forearm. The integuments are hard and brawny in the upper portion of the limb. He has passed the most comfortable night since the receipt of the injury. Mr. Lawrence to-day made a long incision in the upper and forearm, along the inner side, from which sixteen ounces of blood flowed. This was followed by considerable relief to the pain, the cellular tissue being infiltrated with pus. Pt. Tinct. opii, m̄ xl. vespere.—Wine, ʒvj.

14th.—The man passed a quiet night, but to-day his manner is very strange and excited. He talks incoherently, and wishes to go home. It was supposed that delirium tremens was coming on. The condition of the arm is certainly improved.—Sp. æth. comp., ʒss. ; tinct. opii, ʒss. ; mist. camphora, 6tis.; porter, Oij.; tinct. opii, ʒj. vespere.

15th.—The strangeness of manner still continues, and at times he is rather more excited. He is constantly and recklessly moving the arm about, and consequently there is an increase of inflammation in the part. Three more incisions were made in the forearm to-day, and a ring of nitrate of silver around the upper arm.—Pt. Haust., 4tis.; brandy, ʒviiij.

16th.—The man had a severe rigor last night, attended with considerable depression—this was relieved by the administration of a full dose of laudanum, and brandy and water. This morning, symptoms of trismus came on. He complains of a feeling of stiffness about the jaws, of inability to open the mouth to the full extent, and of considerable dif-

feulty in swallowing. The muscles of the neck are slightly rigid, but there is no spasm in any other part of the body; those of the abdomen are quite lax. There is neither pain nor tenderness on percussion over the cervical vertebræ, and with the exception of the region of the jaw, he is entirely free from pain. The skin is rather cold, and very clammy. Bowels confined. He is much more composed and calm than he was yesterday. — Hyd. chloridi, gr. x.; olei crotonis, gtt. ij. Ft. pil. ij.

17th.—The pills have not had the slightest effect.

The rigidity of the muscles of the neck has almost entirely passed away, but the jaws are still firmly clenched; the difficulty in swallowing, even fluids, has also much increased, and he now refuses to make the attempt, not from any feeling of dread, but on account of the pain and spasm with which the effort is accompanied. He states that he had some occasional cramps in the muscles of the calf during the night, but they are now perfectly lax, as well as those of the abdomen. To-day he has become quite rational, and is aware of the nature of the disease from which he is suffering, and of its hopeless character. Towards the evening he became more restless, throwing himself wildly about, and later, he had several well-marked attacks of opisthotonos, in one of which he died.

The friends would not permit any examination of the body to be made.

The following case is of interest, on account of the form of narcotic sedative which was employed. Hyoscyamus has, we believe, been but rarely used in tetanus. The result was the usual one; indeed, we might almost say, the invariable one in cases of that class, the disease being acute, and having commenced within ten days of the injury. We have no space here to make any comments on the principles to be had in view in the treatment of tetanus, or to sum up the results of experience. The reader interested in the subject may find in this Journal, during the first six months of 1854, a series of 43 cases detailed, of which 11 resulted in recovery. The concluding comments on the series, entering with some minuteness into the question of treatment, may be found at page 169, *et seq.* for June 17, 1854. Hyoscyamus had not been given in any of the cases:—

ACUTE TETANUS—TREATMENT BY HYOSCYAMUS—DEATH.

(Under the care of Mr. LLOYD.)

(Reported by Mr. DANIEL, House-Surgeon.)

William Smith, aged 46. This patient, a hatter by trade, was brought to the Hospital on December 30, 1856. He gave the following history of himself:—A fortnight since a nail, which happened to protrude into the interior of his boot to the extent of about one-third of an inch, wounded his left heel. For nine or ten days he felt no particular inconvenience from the accident beyond slight pain at the part, and, therefore, during that time continued his usual work. Three evenings ago, however (Saturday evening), when returning from his business, he experienced some pain and stiffness in the left lower extremity; since then the different parts of his body have become gradually more and more rigid, and finding himself daily getting worse, he to-day (Tuesday) was induced to come to the Hospital. His symptoms now are well marked; his abdominal muscles are very stiff and rigid, as also are the flexor muscles in both lower extremities and the extensors in the upper. The masticatory muscles, too, are contracted to a certain extent, and he has some difficulty in swallowing; there is no distortion in his countenance, and he complains of no pain shooting through his diaphragm. The tongue, on account of the clenched condition of his jaws, he cannot protrude. The pulse is 84. The punctured wound in the heel presents slight lividity at its margins.

2½ p.m.—To be thoroughly purged before adopting any other plan of treatment. Ordered, therefore—Hydrarg. chloridi, gr. v. statim; et post horas duas olei tigllii, mj., 2dis horis. Also, in the course of the day, to have a turpentine injection. The wound in the heel was enlarged, and a poultice applied.

31st, 2 a.m.—He has now had the calomel, four or five doses of croton oil, and the turpentine injection. Until now the bowels had not operated; now, however, and about an hour later they were acted on freely.

10 a.m.—Feels rather more comfortable, he thinks. R Hydrarg. chloridi, gr. v. statim, et pt. post horas duas.

2 p.m.—The bowels have again been freely relieved. He

now complains more of pain at the heel. R. Ext. belladon. Div. ad aquæ, ʒviii.; ft. lotio ad calcem applic. Pulse only 80. Porter Oj. daily.

Later this afternoon he complained of pain at the epigastrium, and cramping pain, as he terms it, at the chest. R. Lin. terebinthinæ, ʒ; liq. ammon. fort. ʒ; ft. linimen. c. quo corpus infricand; and let him take tr. hyoseyami, ʒj. ex aquæ menth., ʒss., statim, et 4tis horis.

January 1.—Has passed a restless night—spasmodic exacerbations occurring from time to time. The pulse this morning is 118. Tr. opii relieved him slightly for a time. In the middle of the day he was given another turpentine injection.

5 p.m.—Complaining more of his epigastrium and chest. The blistering fluid was painted down the whole length of the spine. Increase the dose of hyoseyamus to ʒjss.

11 p.m.—Pulse slower again, now only 84.

2nd.—Last night the spasms were more frequent and more severe. Between them, however, he, on the whole, appears better, and describes himself as feeling so. The rigidity of the abdominal muscles is rather diminished, if any difference at all. Pulse, 106. The porter he likes much; to have Oij. daily. The bowels are relieved sometimes once, sometimes twice a-day.

3rd.—Spasms very frequent and very severe. They last some minutes, causing him much distress. During their continuance he finds much relief by being turned on his side. Pulse very quick, 150 in the minute. Increase the dose of tr. hyoseyami ad ʒij., to be taken in its pure state. To have a beef-tea and brandy injection. The wound in the heel looks well.

About five this afternoon the poor fellow died in a violent spasm.

No post-mortem examination was obtained.

HOSPITAL NOTES.

HÆMORRHAGE AS A SIGN OF CANCER OF THE UTERUS.—Dr. West remarked, in his out-patients' room, at St. Bartholomew's, the other day, on the almost constant occurrence of hæmorrhage as a symptom of commencing cancer of the os uteri. He believed, he said, that it was quite as constant and valuable a sign, in relation to that disease, as hæmoptysis is in respect to tubercle in the lungs. Of course, inasmuch as the uterus is in health subject to sanguineous discharges, there is need of care in determining that the sign be really one of disease; that, for instance, it occurs with an irregularity, and a profuseness greater than disturbed catamenial function could account for. The symptom has its peculiar value when the subject of the affection had previously ceased to menstruate. Dr. West stated, that he had long recognised the importance of the symptom, but that on recently counting up his cases of uterine cancer he had been astonished to find how almost invariably it had been the earliest sign of the existence of the disease.

CAN FIBROUS (MUSCULAR?) (a) TUMOURS OF THE UTERUS BE REMOVED BY ABSORPTION?—The idea seems to be somewhat gaining ground in the Profession, that fibrous tumours of the uterus, even of very large size, are not only susceptible of removal by absorption, but that certain measures of treatment may be adopted which are largely influential in procuring that desirable termination. Thus we are strongly advised to send our patients to drink the Kreuznach waters, to subject them to long courses of the iodides, the sal ammoniae, or the bromides; and even the external use only of the bromide of potassium has been vaunted with some confidence as effectual to the same end. In relation to this question it may not be without interest to our readers to place on record the present opinions of two Physicians, who have, respectively, under care two of the

(a) The appellation of "muscular" has been claimed by Vogel for these tumours, since their structure is, he states, always identical with that of the uterus itself. Mr. Paget, to a certain extent, confirms this opinion, and some very careful examinations by Dr. Bristowe (Pathol. Trans. Vol. iv. page 220) do so most fully. During pregnancy their muscular elements increase in proportion to those of the uterus itself, and also assume a much more perfect development. The distinction is important, and well worthy of further attention, but at present it would, perhaps, be premature to change the name. To Dr. Oldham belongs the credit of having been, we believe, the first English observer who taught this doctrine. His paper (Guy's Hospital Reports, Vol. ii. Second Series, page 105) appeared, however, a year subsequent to Vogel's "Illustrations of Pathology."

largest specialties for the diseases of women in the Metropolis, besides having enjoyed extensive opportunities of observation in private practice. On discharging a woman from his ward in St. Bartholomew's the other day, who had been under care for a uterine fibrous tumour, Dr. West ordered that a course of the bromide of potassium should be persevered with. At the same time he stated to his class, that he had no expectation of benefit from it, and was inclined to refer to erroneous observation the so much boasted cases of removal of fibrous tumours by Medical treatment. He had no faith whatever in such stories, having never known a tumour of that kind disappear, excepting when sloughed out into the vagina. He had tried the recommended remedies, and had sent some of his patients to use the Kreuznach waters. In cases of induration and enlargement of the uterus itself he had known the latter effect much benefit, but in fibrous tumours had never in a single instance been able to note any positive decrease in size. An opinion almost exactly similar to the above, but in yet stronger terms, was expressed by Dr. Oldham to his clinical class, at Guy's, a few weeks ago. He stated positively that he did not believe in the possibility of the absorptive removal of such growths, and appealed to all Surgical experience as to whether such a result was ever obtained with tumours of analogous nature in other parts of the body, where their size from time to time could be accurately estimated. It is of course admitted, on all hands, that fibrous tumours of the uterus may cease to grow, and may even atrophy, and to a certain extent diminish, but this process, when it does occur, is believed to be exceedingly slow, and unconnected with remedial measures. That they may undergo calcification in parts, and that such change is generally attended by drying of texture, and much diminution in bulk, are acknowledged facts in pathological anatomy; but such changes, as far as we yet know, appear to depend upon accidental circumstances in the condition of the tumour, rather than on treatment. For instance, the tumours which become the seat of chalky degeneration, are usually those which have become partially detached into the abdominal cavity, and lost the chief part of their vascular supply, or, possibly, the change may sometimes occur as the result of the advancing age of the patient, and the atrophy of tissues generally.

GANGRENE OF BOTH FEET, AND SPONTANEOUS AMPUTATION.—Mr. McWhinnie has at present under his care a young woman who ten years ago lost both her feet by spontaneous gangrene. She is now nineteen, and of fairly healthy aspect. Her statement is, that when aged nine, without any known cause, she began to suffer extreme pain in both feet, and that subsequently both mortified and came away at the ankles. She was attended by Mr. Harris, of Northlett, in Sussex. It was several years before the stumps were sufficiently healed to allow of her walking on them, and unhealthy ulcers about the malleoli having with very short exceptions been always present. She now comes, wishing to have the stumps improved, and Mr. McWhinnie intends to amputate both, in the lower third of the legs, very shortly. There is a foul and painful ulcer in each.

EXPECTED OPERATIONS.—At St. Bartholomew's, this day, Mr. Lawrence has two cases in which tumours are to be removed; and Mr. Stanley an amputation through the thigh, a perineal section of urethral stricture, and an excision of cancer from the heel. At King's College, on the same day, Mr. Fergusson has an operation for hare-lip, and a removal of an exostosis. At the Metropolitan Free, on Monday next, Mr. Hutchison has a case in which amputation of part of the foot, on account of malignant disease, is to be performed, and some enlarged inguinal glands also removed.

MORTALITY IN NEW YORK.—During the year 1856, 21,263 persons died in New York, of whom 15,996 were natives, 5,133 foreigners, and 134 unknown. The returns include 430 coloured persons. The ages of the deceased were:—Under one year, 7,873; one to two, 2,890; two to five, 2,381; five to ten, 761; 10 to 15, 286; 15 to 20, 440; 20 to 25, 791; 25 to 30, 960; 30 to 40, 1,674; 40 to 50, 1,275; 50 to 60, 746; 60 to 70, 563; 70 to 80, 380; 80 to 90, 148; 90 to 100, 38; 100 and upwards, 3; unknown, 54.

TRIPLE AND QUADRUPLE BIRTHS.—The *Ballinasloe Star* mentions two remarkable births in the neighbourhood of that town during the last week. In one case the wife of a small farmer gave birth to three children; and, in the other, a poor woman in a workhouse was delivered of four children, two of whom have survived.

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Medical Times & Gazette.

SATURDAY, FEBRUARY 21.

THE AMENDED MEDICAL REFORM BILL.

THE delegates from the different Corporate Bodies who met last week at the College of Physicians have terminated their labours and agreed upon the terms of a bill which has been placed in the hands of several members of Parliament this week. It has been entrusted to Mr. Headlam, the member for Newcastle, Mr. Napier, member for the University of Dublin, and Sir William Heathcote, member for the University of Oxford. Mr. Headlam is to move for leave to bring it in on Tuesday next. The members of the Conference were Drs. Mayo, Alderson, F. Hawkins, Nairne, and Burrows, of the College of Physicians; Messrs. Travers, Lawrence, Green, Stanley, and Cæsar Hawkins, of the College of Surgeons; Dr. De Grave, and Messrs. Tegart and Simoens, of the Apothecaries' Company; Dr. Acland, of the University of Oxford; Mr. Harrison, from Trinity College, Dublin; Drs. Neligan and Duncan, from the Dublin College of Physicians; Messrs. Williams, Hughes, and Maunsell, from the Dublin College of Surgeons; Dr. Andrew Wood, of the Edinburgh College of Surgeons; Dr. Seller, of the College of Physicians; and Dr. Watson, of the Glasgow Faculty. The Universities of London and Cambridge and the Scotch Universities were not represented. There were daily meetings from the 7th to the 12th instant, marked by general unanimity and extreme cordiality, with not a little repartee and merriment—and the result has been a Bill, a copy of which, marked "Secret and Confidential," is now before us. Had we received this copy in confidence, had it appeared that any mischief could arise from publicity, or had there been any good ground for keeping a Bill, interesting and important to the whole Profession, a secret confided to a select few, we should have deferred any notice of its provisions until after it had been brought before Parliament. As it is, we shall not print the entire Bill this week, but confine ourselves to a few of the clauses, which will put our readers in possession of the main principles of this measure on the matters in which they are especially interested, namely, the constitution of the Council, the requirements for Medical education for the future, uniformity of qualification, and the punishment of false pretenders to Medical skill and knowledge.

The following clauses refer to the constitution of the Council. It will be seen that the number of members and the proportion of Government nominees has not been defined.

"IV. A Council, which shall be styled 'The General Council of Medical Education and Registration of the United Kingdom,' and which shall comprise branches for each division of the United Kingdom respectively, shall be established for the purpose, as hereinafter provided in this Act, of effecting uni-

formity of education in the United Kingdom, of regulating the several subjects in which candidates for the diplomas or letters testimonial of the respective licensing bodies shall be examined, and of determining as to the fitness and efficiency of Medical schools, and the mode of the annual publication of the registers of legally qualified Practitioners.

"V. The Council shall consist of representatives of the Medical Corporations and Universities of the United Kingdom; and of persons whom Her Majesty, with the advice of her Privy Council, may appoint, being persons qualified to be registered under this Act, and not being members of Council or Office-bearers of the said Corporations.

"VI. The representatives of the Medical Corporations and Universities of England, Scotland, and Ireland, and the members nominated by Her Majesty, with the advice of her Privy Council, for each division of the United Kingdom, shall be the Branch Councils for each division of the United Kingdom respectively, to which Branch Councils it shall be deputed to carry out in the respective divisions of the United Kingdom the regulations of the General Council as to education and registration."

Provision is made for registration by the appointment of a registrar for England and the General Council, and one for each of the Branch Councils of Scotland and Ireland; the registers to be published. Provision is also made for preliminary examination in general education. The examinations in Medicine, Surgery, and Midwifery are to be conducted in England as follows:—

"The examinations in Medicine, and also in its collateral sciences, except in cases in which it shall seem to the Council that the examination in the collateral sciences has been otherwise complied with, shall be conducted, at the Royal College of Physicians, by a Board consisting of Examiners, of whom one half shall be appointed by the Royal College of Physicians of London, and shall be duly registered as Physicians, and one half by the Master Wardens and Society of Apothecaries of the City of London, who shall be persons duly registered as Surgeons and Practitioners in Medicine and Midwifery.

"The Examiners constituting this Board shall have an equal voice in the conduct of the examinations and other proceedings of the Board. There shall be no apportionment of the subjects of examination between the several examiners, unless with the express consent of every individual examiner, but every examiner shall be entitled to examine on each and every subject of examination.

"The Chairman of this Board shall be one of the Examiners, appointed by the Royal College of Physicians, and shall be elected by a majority of votes of all the examiners present at the meeting of the Board, at which such election shall take place.

"The Chairman shall not be entitled to vote, except in the event of the votes of the other members of the Board being equally divided, in which case the Chairman shall have a casting vote.

"The examinations in Surgery and also in its collateral sciences, except in cases in which it shall seem to the Council that the examination in the collateral sciences has been otherwise complied with shall be conducted by the Court of Examiners of the Royal College of Surgeons of England.

"The examinations in Midwifery shall be conducted at the Royal College of Surgeons of England, by a Board consisting of Examiners, of whom one-third shall be appointed by the Royal College of Physicians, one-third by the Royal College of Surgeons of England, and the remaining third by the Master Wardens and Society of Apothecaries of the City of London, and of a Chairman, who shall be appointed by the Council of the Royal College of Surgeons of England, and shall be one of the Vice-Presidents or other members of the Council of the said College. The Examiners of this Board shall have an equal voice in the conduct of the examinations and the other proceedings of the Board.

Somewhat similar arrangements are made for Scotland and Ireland, except that the Apothecaries in Ireland take no share in the examination; but we have not space to give these regulations in detail this week.

The following clause shows what has been done towards securing uniformity of qualification:—

"XXIII. The said several Colleges and Faculty shall from time to time, when required by the General Council, prepare and lay before the General Council a scheme of the course of study and particulars of the examinations to be gone through, and of the fees to be taken for such examinations by all persons applying to such Colleges or Faculty respectively for letters testimonial as Physicians or Surgeons; and the General Council shall be empowered to fix a minimum fee for such examinations, and shall make from time to time such changes in any of the schemes so laid before them as to them shall seem expedient; and the General Council shall procure, as far as is practicable, that the qualifications for the said testimonials shall be uniform, according to the nature thereof, throughout the United Kingdom."

After providing that none but registered persons can recover charges for Medical or Surgical advice, etc., or can hold appointments in the public service, or any public establishment, and that no certificate required by any act now in force can be valid unless the person signing be registered, the following clauses appear:—

"XXXI. Every person not registered under this Act who shall wilfully and falsely pretend to be, or take or use any name, title, admission, or description implying that he is registered under this Act, or that he is recognised by law as a Physician, or Surgeon, or Apothecary, or a Practitioner in Medicine, shall, on being summarily convicted of every such offence, before any *two* Justices of the Peace for the county, city, or place where the offence was committed, pay a sum not exceeding twenty pounds nor less than five pounds, to be recoverable as hereinafter described.

"XXXII. Any *two* Justices of the Peace acting in and for the county, city, or place in which the offence has been committed, may hear and determine any complaint made under the next preceding clause, on the oath of one or more witnesses, or by the confession of the accused party, and shall award the penalty or punishment herein provided for such offence; and in every case of the adjudication of a pecuniary penalty and of nonpayment thereof, it shall be lawful for the said Justices to commit the offender to any goal or house of correction within his jurisdiction for a term not exceeding six calendar months, the imprisonment to cease on payment of the sum due."

This is not going very far towards the suppression of illegal practice, but it is quite as much as the House of Commons is likely to agree to.

The remainder of the bill relates to proposed new Charters for the Colleges of Physicians of London, Edinburgh and Dublin, but we must defer any comment on these Charters at present, and conclude by putting our readers in possession of what is known as to the state and prospect of medical legislation for the Session.

On Monday, the 16th, at twelve o'clock, a deputation consisting of representatives of the various corporate bodies interested in the proposed Medical Bill, waited on Lord Palmerston. These were Dr. Mayo and Dr. Hawkins from the Royal College of Physicians of London, Messrs Green and Travers from the College of Surgeons, the Master of the Society of Apothecaries, Dr. Acland of Oxford, Dr. Maunsell, and Dr. Williams of Dublin, Dr. Watson of Glasgow, and other representatives of the Scottish and Irish Corporations, and the three members of Parliament, Sir. W. Heathcote, Mr. Headlam, and Mr. Napier, who have undertaken to conduct the Bill in the Commons, and who are requested by the corporations to act as arbitrators on any point which may be in dispute between them. Lord Palmerston received the deputation very civilly, and expressed his gratification at the appearance of such real harmony amongst the Medical authorities. Not having seen the Bill, he could not pledge himself nor his colleagues, but he promised it every consideration.

So much for the Corporations and their Bill. It remains to be seen what course the Universities of London and Scotland will take.

THE WEEK.

Mr. Wormald's Hunterian Oration last Saturday was one of the most successful that has been delivered of late. He confined himself strictly to an exposition of the character and labours of Hunter, alluding briefly to those who have carried them out in the College in our own time—Owen and Quekett, to Guthrie the "great departed" of the year, and to our military surgeons, who went through the late war, who rest from their labours with the millions under ground. The great points of interest in the lecture were the exhibition of a dried preparation of a lower extremity, dissected by Mr. Wormald in 1837 from a man on whom Hunter had tied the femoral in 1787—the proof that Hunter had anticipated much of our modern knowledge of phlebitis and pyæmia; and the still more remarkable and clear demonstration from his writings and recorded cases that he was not only aware of the principle of the treatment of aneurism by compression, but that he had actually cured a popliteal aneurism in the manner recorded by the Dublin surgeons, and which we are only now perfecting.

Crinoline est morte.—Not the least important of the death of the week, this death of Crinoline. The hoops, and rings, and skirts thirty-six yards wide, will disappear now that the French empress, no longer *enceinte*, has appeared in a dress of extremely moderate circumference. It is said that the leaders of fashion have also combined in another sanitary movement, and that the dresses of our ladies will permit of their wearers walking without the necessity either of employing their arms to carry their dress, or of dragging a wet strip of petticoat along to freeze their ankles, and bring on cold feet, rheumatism, and all their evils. Tight-lacing is now almost a thing of the past; and if the low evening dress be reformed, and the chests of our fair daughters protected by ample folds of "purple and fine linen," we shall have less of cough and consumption among them; when bonnets, too, are made to cover the head, and protect it from the sun or rain, many cases of neuralgia and tic douloureux, face-ache and tooth-ache, will disappear.

It is so seldom that representations made to Poor-law Guardians on behalf of their Medical officers have been attended with success, that we have the greater pleasure in recording the fact that the Guardians of the Thornbury Union have agreed to increase the salary of Mr. Edward Long, whose remuneration has hitherto been utterly inadequate to the services performed. In this instance, the nobility and county gentlemen of the Board of Guardians stepped forward in behalf of our Profession, and by their influence obtained the addition to which Mr. Long was so justly entitled.

The resolutions of the President and Council of the Royal Society, just submitted to Lord Palmerston, have an important bearing on the relations which should subsist between Science and the Government. We do not give the resolutions at length, because it is tolerably certain that they will not be accepted by Lord Palmerston. They would have the effect of submitting the entire direction of scientific affairs to the Royal Society, and of raising it to the position of a Government Department. It would be far better to have a Minister of Education directly responsible to Parliament for his department. It is quite another question, however, as to the increase in the grant annually placed at the disposal of the Royal Society for the advancement of science. It is a disgrace to this country that this sum should only be £1000. The Royal Society have expended the money entrusted to them in a manner which has encouraged scientific men, and has been a

direct pecuniary benefit to the nation. A further grant would not only be a further encouragement to science, but a gain to the community at large.

We are happy to find that the cause of Poor-law Medical Reform is steadily advancing, and that Mr. Griffin's philanthropic labours are beginning to bear some fruit. By a recent communication from the Poor-law Board, a most important benefit has been conferred upon the Poor-law Medical officers; for it is now decided that a Union Surgeon is compelled to attend only the patients in his own district, and that if he is called upon to attend, in consultation, other patients residing out of his district, he has a claim to remuneration from the Guardians. It is also laid down in the General Regulations of the Poor-law Board, that it is the duty of the Relieving Officer "to procure attendance by giving an order on the District Medical Officer, or by such other means as the urgency of the case may require." It may be remembered that Mr. Griffin was called upon to attend, in consultation, certain urgent cases of illness occurring out of his own district, and that the Guardians refused to allow him any remuneration for the services rendered. The Poor-law Board, however, has decided that the remuneration could justly be claimed, thus establishing a precedent for the guidance of Poor-law Unions in future cases. Hitherto we understand that it has been customary for Union Medical officers to assist each other gratuitously, but such friendly services will no longer be necessary, as the gentlemen called in consultation may prefer a claim to remuneration from the local Board; and we hope that any gentleman who is placed in such circumstances will not fail to do so. In cases of difficulty, and where additional aid is imperatively necessary, the Union Surgeon should send a written communication to the Relieving Officer, requesting an order for Professional assistance, and the latter is bound to comply with the demand. With regard to Mr. Griffin's own episode with the Weymouth Guardians, and their secret representations against him to the Poor-law Board, we understand that the latter Board has declined to transmit to Mr. Griffin a copy of the charges said to have been preferred against him, alleging for their non-compliance the following reasons:—"As the Board have not received any specific charge against you which they can entertain, they do not think themselves called upon to furnish you with a copy of the letter referred to. It will be competent to the Guardians to supply you with a copy of the Resolutions which they have forwarded to the Board, and the Board must accordingly refer you to them on the subject." This is satisfactory to a certain extent, but it is very unlikely that the Weymouth Guardians will comply with the suggestions here thrown out, as they have evidently no desire to meet Mr. Griffin in fair and open conflict. We are glad to find that the *Civil Service Gazette* has taken up the cause of the Poor-law Surgeons, and in a series of leading articles is exposing the wrongs which that class of our Profession has so long, and hitherto so patiently, endured. The advocacy of the political press may do good service to the cause of Poor-law Medical Reform.

A case has been tried this week in the Court of Common Pleas of considerable interest to the Profession, as the Medical evidence was conflicting. A railway clerk struck the back of his head against a shelf in a carriage, at the moment of a collision, last May. He did not feel any the worse at the time, but the next day he complained of head-ache, giddiness, and depression. The day after he applied to a Surgeon at Chester who practicing homœopathy, who prescribed rest, and arnica. The symptoms increasing the patient went to Dr. Gully's water-cure establishment at Malvern, and remained

there, with intervals of a few weeks, until the present time. The symptoms he complained of were head-ache, giddiness, loss of memory, sleeplessness, want of power over the rectum and bladder, and some loss of muscular power in the left arm and left leg. He was seen on the part of the Railway Passengers' Assurance Company in August last, by Dr. McEwen, of Chester, who thought him to be in a state of good general health; and by Mr. Holt, the Surgeon of the Company, who recommended the Company to pay £100, and they paid £250, the patient having been insured for £1000, in case of death. He was seen in November by Dr. Hassall and Mr. Spencer Wells, in January by Mr. Fergusson, and very lately by Mr. Solly and Dr. Waller Lewis. Mr. Lawrence and Mr. Arnott, who gave evidence, had not seen the patient before his appearance in court. The principal question to be decided by Medical evidence was, whether such symptoms as were complained of by the plaintiff in the cause could have come on in consequence of an injury to the nervous system, if there had been no insensibility or other severe symptom at the time of the accident, or immediately following it. Mr. Solly, Mr. Spencer Wells, Dr. Hassall, Dr. Lewis, and the other Medical witnesses called by the plaintiff, answered this question in the affirmative, and quoted cases in which very severe symptoms had developed themselves some time after an accident, which at first had appeared to be very trivial in its consequences. Mr. Lawrence said he had never seen such a case in all his long experience, but admitted that if a man came to him on a Monday complaining of such symptoms as the plaintiff described, and said he had received a blow on the head on the Saturday, he should look upon the blow and the symptoms as cause and effect. Mr. Fergusson agreed with Mr. Lawrence, but admitted that he had seen a case in which a man who was partially paralysed three weeks after an injury, had been so little hurt at the time of its receipt that he had taken an omnibus drive, partaken of a champagne wedding breakfast, and been out in a boat for a row. Mr. Arnott thought there had been some injury to the brain which did not amount to concussion. Mr. Holt admitted that the plaintiff had received slight injury to the brain, but had never known a case where such serious symptoms supervened as described by the plaintiff, without symptoms at the time of the accident, or from 12 to 24 hours afterwards. The jury awarded £1400 damages to the plaintiff.

Two deaths from strychnine during the past week again show the necessity for restricting the sale of poisons. Anne Boxall, of Petersfield, committed suicide by taking some of Battle's "vermin-killer," which was easily procured at a druggist's, and contains strychnine. Mr. Gummow, of Newport, took three grains of strychnine he had procured without difficulty from a druggist. He said he wanted it to kill rats, and the druggist, in his examination, admitted that he had "sold the same for killing rats, for four or five years past, to many persons." The symptoms in both cases were violent spasms and trismus. In the male case there was extreme post-mortem muscular rigidity—the right side of the heart was found full of blood, the left empty. In the female case, the only morbid appearances described are those of gastritis.

The inaugural meeting of the College of Dentists was held last Saturday, when an introductory address was delivered by the President, Mr. Robinson. It was listened to with great attention, and much applauded by a crowded audience. We have no wish to enter into the questions of difference between the Odontological Society and the College of Dentists; but, as both appear to have the same object in view—the elevation of the professional character and the social position of Dentists

—we can only hope that temporary differences may still be adjusted, and that the two bodies may look rather to what the Profession will be twenty or fifty years hence than what it is now, and act together accordingly for the good of their Commonwealth.

REVIEWS.

The Queen's University in Ireland, and the Queen's Colleges; their Progress and Present State: An Address delivered at the Distribution of Prizes in Queen's College, Cork, by Sir ROBERT KANE, V.P.R.I.A., F.R.S., President, November 27th, 1856. Dublin. Pp. 59.

A considerable portion of the Address before us is occupied with a comparison between the number of "lay" students who annually enter the University of Dublin, and that of the total entrances into the Queen's Colleges of Belfast, Cork, and Galway. The numbers originally given by Sir Robert in the address as delivered *vivâ voce*, are considerably modified in the printed pamphlet; nevertheless we think the proportion assigned to the former category is still much too low. On this subject Sir Robert assumes an appearance of mathematical accuracy, which cannot by any means really exist. "If we take," he says, "the academic year now past, 1855-56, what do we find? that there entered the University of Dublin, by the Junior Bursar's return, but 219 students, of whom there were of lay students only 98." Now how Sir Robert arrives at this accurate information is not conceivable, not even if we suppose him to have questioned each of these 219 students individually as to their ultimate intentions, for many pass through the first two or three years of their academic career without having finally made up their minds on the important point of the choice of a profession. It is not until the fourth, or Senior Sophister year, that the proper theological studies commence, and it is only then that the relative proportion of the lay and divinity students can, with any precision, be determined. Sir Robert, however, evidently applies to this particular instance the proportion he supposes he has established as an average. We have already stated our conviction that the number he has deduced as that of the lay students is too low; but this is not a matter of great importance. Sir Robert proceeds to say that the mode of obtaining the degree of Bachelor of Arts in the University of Dublin "is a form, and anybody who can get through college so far, can scarcely fail to obtain the degree." This is by no means true; the degree-examination in the University of Dublin is a *bonâ fide* and strict examination. Sir Robert adds, "there is nothing that can properly be called a degree-examination, in the arts faculty, except by some recent reforms in which the arrangements of the course of study for degrees in arts have been in some degree assimilated to the plan of the Queen's University." The Queen's University was founded on the 15th of August, 1850, the degree-examination in the University of Dublin was "reformed" in 1842, and the vast and progressive improvements in the courses of education in the latter institution, which we have more than once had occasion to commend in the pages of this Journal, and which have quite kept pace with the increasing knowledge and practical spirit of the present day, were commenced about the year 1834, during the provostship of the late Dr. Bartholomew Lloyd, who was, we believe, the chief promoter of the movement.

Sir Robert states, that "of all its candidates for degrees, the University of London rejected 1 out of every 4½, and the Queen's University has rejected 1 out of 7;" and he asks, "How does this come? Is it that our degrees are more easily obtained; that our examinations are less strict; that the courses are lighter; that our candidates get off too easily?" He does not believe that there is any material difference in the severity or the extent of the degree examinations in the London University and in the Queen's University. He thinks they are about the same; and after these premises his solution of the question certainly implies a comparison the animus of which may, we suppose, be taken as a measure of Sir Robert Kane's modesty: "If our students are more successful, if we have fewer rejections, I believe it is due to the great zeal and ability with which my learned colleagues, the professors in this College, and the professors in

the other Queen's Colleges, have devoted themselves to the laborious duties of instruction in their several departments."

But to return to the case of the Queen's University *versus* the University of Dublin. We must, once for all, deprecate the attempts which have, in more than the present instance, been recently made to elevate infant institutions by depressing the time-honoured establishment which has nobly weathered the storms of three centuries. Thus many weeks have not elapsed since an attempt was made to prove that the University of Dublin has not fulfilled her mission, because the graduations in Ireland are not so numerous as in England; leaving out of view, that while the former country has, until within the last seven years, had but one university and but *one college* in connexion with that university, England has had in full operation the Universities of Oxford, Cambridge, Durham, and London, while in connexion with the last-named there are, scattered through England and Ireland, twenty or thirty minor colleges empowered to issue certificates to candidates for degrees in that university. It was pointed out, too, that many Englishmen, intended for the Church, resort to Trinity College, Dublin, for their education; but it was omitted to be stated that a far greater number of the nobility and gentry of Ireland, ambitious of writing "Oxon." or "Cantab." after their names, flock to the ancient seats of learning represented by these letters, for their degrees. In like manner Ireland was compared with Scotland, possessing, to a much smaller population, four ancient Universities in different parts of the kingdom, giving degrees in medicine independently of education in arts, and for this very reason resorted to by the great bulk of Irish Medical Students, (as in the University of Dublin graduation in Medicine can take place only after four years' extensive study in arts, and after graduation in that faculty); and with the United States, where, according to the "American Almanac" for 1843 (a), there are 103 Universities, only distinguished from academies by the privilege of granting degrees, and many of them so imperfectly organized as scarcely to deserve to be mentioned.

We wish the Queen's Colleges every success in the important object for which they were designed, and we trust and believe that their success has been much greater than we should *a priori* infer from the fact of the President of one of them thinking it necessary to endeavour to magnify his own, at the expense of another institution. But why should such unworthy jealousy exist; why should not all endeavour harmoniously to discharge their important task of educating and elevating the people entrusted to their care? Let those of the latter, to whose circumstances attendance on the Queen's Colleges and graduation in the Queen's University is better adapted, gladly avail themselves of the opportunity of University education which the wisdom of the legislature has provided for them in the foundation of these establishments; and let the venerable walls of the ancient University receive those who are desirous of enrolling their names in the same lists with Ussher, Edmund Burke, Berkeley, Elrington, Plunket, Graves, Lloyd, MacCullagh, and numerous other celebrities who have from time to time reflected honour on their country and their *alma mater*.

A Treatise on Therapeutics and Pharmacology or Materia Medica.

By GEORGE B. WOOD, M.D., late President of the American Medical Association. In two volumes. Philadelphia, 1856.

THERE are many circumstances which render a work on *Materia Medica*, from the pen of Dr. George Wood, a valuable contribution to Medical literature. He was occupied for a period of thirty years in teaching this branch of science; he held, moreover, for about twenty years the office of Physician to the Pennsylvania Hospital; he is also the author of a *Treatise on the Practice of Medicine*, and one of the authors of the *United States Dispensatory*. He, therefore, brings to his task the results of matured observation, and great experience in literary composition. He divides his present work into two parts, the first of which treats of General Therapeutics and Pharmacology, including the operation, the application, and the classification of medicines; and the second is devoted to Special Therapeutics and Pharmacology. In this second part, which is the most extensive, Dr. Wood arranges medicinal substances according to their action upon the human economy,—a plan which

is certainly open to numerous objections, inasmuch as many medicines must, under such a system, be treated under different heads; and on the other hand, some will differ in their effects according to the dose or the time of their employment. As an illustration of the difficulty of fixing the true position of drugs in such a classification, we find opium placed by Dr. Wood among the cerebral stimulants, together with alcohol and ether; although, with equal propriety, opium might be placed at the head of the sedatives. Henbane and belladonna are also ranked by Dr. Wood with the cerebral stimulants.

With this protest against the system of classifying drugs according to their therapeutical action, our opinion of Dr. Wood's *Treatise* is, that it is a most able contribution to the subject of *Materia Medica*. It is not encumbered with formulæ, and contains very few chemical or botanical descriptions; but it is rich in the lessons of experience, and bears in every page the impress of a well-stored and reflective mind. It will be doubly welcome to the many friends and admirers of Dr. Wood, and to the cultivators of American Medical literature in general, as it is announced to be in all probability the last professional treatise of its respected author. We should remark that the type is remarkably good, and almost entirely free from errors.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON THE AGES AT WHICH HYSTERIA OCCURS.

By M. BRIQUET.

M. Briquet, physician to La Charité, has entered into an inquiry having for its object the more exact determination of the ages at which hysteria occurs. According to M. Landouzy, who carefully collected all the cases he could find scattered through medical literature, 341 in number, in 153 hysteria appeared between the ages of 17 and 20; in 120, between 20 and 30; in 43, only between 30 and 40; and in 25, between 40 and 85. Among 20 cases observed by Georget at the Salpêtrière, 13 occurred prior to 20 years of age, and 7 between 20 and 28. M. Briquet himself has carefully sought for the period of the development of the disease in 406 cases, the particulars of which he has noted during 10 years; and a former pupil, M. Besançon, has made similar researches in 61 cases of hysteria occurring at the Loureine, giving thus the large total of 467 cases carefully inquired into. Of these cases, M. Briquet gives detailed tables of the ages. From these it results that hysteria, in 68 cases, that is, in more than a seventh of the whole, was developed prior to the 11th year; and if it has been sometimes difficult to determine the nature of the attack at an early age in some of these, this has afterwards been cleared up by subsequent observation. The following is the general summary given:—

	Landouzy.	Georget.	Briquet.
From birth to 10 years	—	1	61
" 10 to 15 "	48	5	104
" 15 to 20 "	105	7	162
" 20 to 25 "	80	4	73
" 25 to 30 "	40	3	28
" 30 to 35 "	38	—	13
" 35 to 40 "	15	—	12
" 40 to 45 "	7	—	3
" 45 to 50 "	8	—	1
" 50 to 55 "	4	—	2
" 55 to 60 "	4	—	1

It will be observed that M. Landouzy's early figures are not proportionately so numerous as M. Briquet's, while his later ones are more so. In M. Briquet's cases, however, the period of the origin of the hysteria was very exactly noted, specifying whether there had been a paroxysm or other hysterical phenomena; while in the cases collected by M. Landouzy such precaution was not taken. But, as in many cases simple hysterical phenomena precede the attack, properly so called, perhaps for several years, it follows that to give M. Landouzy's figures more exactitude the early numbers require to be increased somewhat and the later ones diminished. Making this correction, there is a great accordance between the two sets of figures; and it may be stated that hysteria increases in

(a) Quoted in the "Penny Cyclopædia," London, 1843—Art. Universities.

frequency until the age of 20, at which the maximum is attained; that it decreases rapidly in frequency from 20 to 40; and remains stationary, and is but of unfrequent occurrence, between 40 and 60.

The general conclusion is, that a considerable number of cases occur at an age when the generative organs can exert no influence; and that the period of the development of this disease bears no direct relation to the period of activity of these organs. Of the 400 hysterical females observed by the author, 139 were either married women or had had children. Of these, 53 had not reached 20, and 86 had exceeded that age. Of 364 pregnancies occurring among them, 72 took place prior to, and 292 subsequent to, the same period.

Union Méd. 1856. No. 114.

EXCERPTA MINORA.

Rupture of the Œsophagus during Puerperal Convulsions.—The patient, æt. 20, was delivered at the Lisbon Lying-in Hospital. Violent puerperal convulsions came on just prior to delivery, and she expired in the fourth paroxysm. There was found considerable cerebral and pulmonary congestion, and the Œsophagus was ruptured to such an extent as to admit the introduction of two fingers, the structure of the part presenting no morbid appearance. A lumbricus issued through this accidental aperture.—*Ibid.* No. 2.

Treatment of Menorrhagia.—Dr. Mitchell strongly recommends the following formula in menorrhagia:—℞. Tinct. kino, ʒij.; tr. cinnam. ʒj.; pulv. sulph. cupri, ʒj. M. The dose is 10 drops thrice daily in a little sweetened water. The quantity of the sulph. cupri is to be increased or diminished according to the urgency of the symptoms and the degree of tolerance.—*Med. Independent (Detroit)*, December, 1856.

Chloroform in Fissure of the Anus.—M. Chapelle, believing that fissure of the anus is of a neuralgic character, has been induced to try the effect of the local application of chloroform (diluted with half its quantity of alcohol), and has met with complete success. The proportion of chloroform may be increased or diminished according to the susceptibility of the patient, and the mixture is applied upon a water-colour brush, whence the fluid is to be allowed to be squeezed out by the contraction of the sphincter. The sharp pain which results is of very short duration.—*Ibid.*

Influence of Lachrymation in Affections of the Eye.—M. Brachet believes that the influence of lachrymation has not been sufficiently admitted, notwithstanding its evident influence in allaying irritation induced by the presence of foreign bodies, etc. So also even severe ophthalmias may be relieved by the same means. Lachrymation exerts its effect by its direct emollient action on the eye, and by the resolvent or critical action consequent on increased secretion. The various collyria and other applications made to the eye in ophthalmias, opacities, etc., act by virtue and in proportion to the amount of lachrymation they induce; and in several cases M. Brachet has found the same results follow the induction of lachrymation, by irritating the eye with a feather or the head of a pin.—*Gaz. des Hôp.* 1856, No. 123.

Cements for Stopping the Teeth.—M. Vagner recommends the following:—A drachm of gutta percha, softened by hot water, is to be worked up with catechu powder and tannic acid, of each half a drachm, and with a drop of essential oil. For use, a morsel is to be softened over the flame of a spirit lamp, introduced while warm into the cavity of the tooth, and adapted properly. The mass becomes hardened, and even after several months exhibits no traces of decomposition. M. Pouton states that we may also obtain an excellent cement by dissolving one part of mastic in two of collodion. Having well dried out the cavity, a small ball of cotton soaked in some drops of the solution is to be introduced. It soon solidifies, and may remain *in situ*, seeming also to exert an influence on the further progress of the caries.—*Rev. Médicale*, 1857, p. 55.

ALLEGED DEATH FROM EATING "LOCUST NUTS."—An inquest was held on Wednesday, at King's Cross, on the body of Edward Thomas, aged 17, who died very suddenly after eating some "locust nuts," a new kind of fruit recently imported from Egypt. The inquest was adjourned, that an analysis of the nuts might be made, to ascertain if they are poisonous.

FOREIGN CORRESPONDENCE.

MEDICINE IN HOLLAND.

I send a few more selections from Dutch Journals. The last appeared in your 32nd Vol., page 478.

ON STENOSIS FUNICULI UMBILICALIS.

By Dr. BROERS.

Since his former communication on the subject, the author has arrived at the conclusion that constriction of the umbilical vessels is not always to be ascribed to twisting (*ineendraaijing*) of the cord. He thinks, in consequence of his subsequent investigations, that the several cases of stenosis funiculi must be classed under three heads:—1. Stenosis near the abdominal wall, combined with twisting of the cord; 2. stenosis in another situation, likewise attended with twisting of the cord; and 3. Stenosis by ligature of the funis, in consequence of its being surrounded with threads derived from the cutaneous epithelium. The author describes seven of his preparations of stenosis funiculi umbilicalis; in all, the entire skin was covered with patches of epithelium, while in some it was said that a slender thread or a shred of epithelium twisted into a band, had encircled the cord, and formed a tight ligature around it. The exudation of epithelium was probably a consequence of dermatitis.—*Nederlandsch Tijdschrift voor Heel-en Verloskunde, Ziekten der Vrouwen en der Kinderen*, from the *Nederlandsch Lancet*, 1855. No. VII., p. 447.

[At page 384 of the recent edition of Dr. Montgomery's work on the "Signs and Symptoms of Pregnancy," a very good representation will be found of stenosis of the funis, occurring in the same case, at both the umbilical and placental extremity of the cord.]

THREE CASES OF TRACHEOTOMY IN CROUP.

By L. LAMIE.

In December, 1853, numerous cases of croup occurred at Utrecht; in three instances tracheotomy was adopted as a last resource, and was performed by Heer Lamie. The result was in all unfavourable; the first child aged 2½ years, died quite unexpectedly, 58 hours after the operation, which at first promised the most favourable result; the cause of death was not revealed by the post-mortem examination; the lungs were everywhere free from inflammation. The second child was fifteen months old; the operation was in this instance had recourse to at a very late period, so that it was feared the child would die during its performance; repeated insufflation of air through the canula was subsequently necessary, in order to establish respiration; some hours afterwards symptoms of pneumonia set in, of which the child died about 30 hours after the operation. The third case was that of a little boy of three years, who was said to have had an attack of croup two years previously. Here, too, tracheotomy was performed to prevent death by suffocation, and its immediate effect was strikingly favourable; but the child died in about fourteen hours after the operation, the fatal result having been preceded by a tolerably violent attack of fever. In conclusion, it must be observed that the parents of the children operated on belonged to the pauper class, whose wretched abodes present so many unfavourable circumstances.—*Ibid.* p. 447.

ON RETAINED PLACENTA.

By Dr. A. F. H. DE LESPINASSE.

In a case of placenta incarcerated the author has seen favourable results from the anæsthetic employment of chloroform. The placenta was retained in the right part of the cavity of the uterus, which organ had contracted so firmly around it, that it was with difficulty two fingers could be introduced into the opening through which the funis passed. But during anæsthesia from the action of chloroform, the author succeeded without much exertion in passing the fingers formed into a cone, half-way through the constricted portion; the woman, however, recovered her consciousness too soon, and at the same time Dr. Lespinasse felt the pressure on his fingers increasing, so that their free motion became impossible. He now caused the chloroform to be again inhaled, and felt the stricture diminish and the free motion of his fingers return *pari passu* with the increase of the anæsthesia; he was now enabled to reach and remove the placenta.—*Ibid.* p. 448.

GENERAL CORRESPONDENCE.

UNLICENSED PRACTICE.

[To the Editor of the Medical Times and Gazette.]

SIR,—The perusal of a statement at page 145 of your last number relative to a case of maltreatment of the humerus by a non-professional person, prompts me to the following note.

I have recently had occasion to visit two or three different towns in my own county, and in the county adjoining, and I have had opportunity of observing what a perfect farce, at the present time, is the supposed authority of the Apothecaries' Act. Druggists of the smallest possible educational calibre, in fact, men of no education at all, are acting far and near in the most fearless manner as General Practitioners, treating medical and surgical cases indiscriminately, visiting, prescribing, and sending medicines for all sorts of maladies to people of almost all classes; nay, further, are commenting right and left on the treatment adopted by licensed practitioners in various cases of disease, constituting of course an unerring court medical. In my own town I thought the state of things was very bad, having witnessed some very flagrant and impudent conduct, but it is the same in other towns. I have hitherto forbore from making much remark on account of the fact, well known to myself, that animadversion on my part would be certainly misconstrued, because I knew that whatever might be intended by me for the general good, would be, by the very discerning public, attributed to private animosity or private interest. The truth is, that if a legitimate practitioner anywhere puts himself forward to suppress the violation of the law by his fellow-townsmen the druggist, he is at once looked upon by the community as a censorious person, and the druggist as a martyr, which latter seldom fails to make a profit of his martyrdom. Any man of reflection must know full well that the heretical boobies amongst ourselves who have exerted themselves to dress up homœopathy and some other pathies as realities, and to caparison quackery in the garb of science, have done much to hatch this mischief; and I assert, without fear of contradiction, that it is quite as mischievous to the public as to the medical profession. Surely, Sir, this usurpation on the part of drug-sellers should be put down somehow, else what a palpable folly is the existence of any licensing body at all! Pray insert this note in your Journal, if convenient, as possibly it may attract the attention of some of your numerous readers who may be disposed to offer some hint on the subject. I am, &c.

CHARLES FLUDER.

Lymington, Hants, 11th February, 1857.

MR. STARTIN'S METHOD FOR THE PREVENTION OF PITTING IN SMALL-POX.

[To the Editor of the Medical Times and Gazette.]

SIR,—Several communications upon the means of preventing pitting in small-pox having lately appeared in your pages, I am induced to forward you a method which has been uniformly successful in every appropriate case in which an opportunity for adopting it has been afforded me; which may amount to twelve or fourteen cases during the last few years.

The plan consists in applying the acetum cantharidis (P.L.) or any vesicating fluid (a), by means of a camel-hair brush to the apex of each spot or pustule of the disease, on all the exposed surfaces of the body, until blistering is evidenced by the whiteness of the skin in the parts subjected to the application, when the fluid producing it is to be washed off with water or thin arrow-root gruel.

The vesication for each pustule should not be larger than the eighth or sixth of an inch in diameter, leaving intact the boundaries of the inflammation, excepting where the malady has become confluent, when the entire surface so affected should be vesicated.

With respect to the best period of the eruption of small-pox for making this application, although between the fourth and eighth days should be preferred, the vesication has seemed to me to have been efficacious whenever it has been practised before the slough has formed, evidenced by the secretion of pus, which slough is at once the cause of the

(a) It will be observed, that this practice of vesication is the opposite to that recommended by the writers advocating nitrate of silver, who desire to avoid the blistering process.

pitting, and the peculiar characteristic of this formidable malady.

The only after-treatment in these cases consists in puncturing the blisters with a needle, in keeping the affected skin clean by means of arrow-root or rice gruel (avoiding soap of every kind), and in bathing the eruption several times a day by the aid of soft sponge or linen wetted with the following lotion:—R Sodæ biboracis, ʒj.; Ammonia sesquicarbonatis, ʒj.; Acidi hydrocyanici diluti, ʒj.; Glycerini destillati, ʒss.; Aquæ rosæ ad ʒviij. M. Ft. lotio.

The pain attending the application of the vesicating fluid is very slight and transient, disappearing almost simultaneously with the ablutions recommended, nor does the blistering add much to the disfigurement, while it relieves the pyrexia and cerebral symptoms, should they be present. The rationale of the benefits arising from the method appears to me to be comprised in John Hunter's observation, that "if you can succeed in changing the character of an inflammation, you will often succeed in curing a specific disease;" which he calls "the mode of cure by an irritation different from the disease;" (b) for he holds elsewhere, that "no one disease can have two distinct and different critical inflammations." Within the last fortnight I have had opportunities of testing the efficacy of the plan above advocated in two successful instances; the first occurred in the daughter of a well-known F.R.C.S., residing in my neighbourhood, whose obliging note I enclose in verification of my remarks.

"My dear Sir,—In reply to your inquiries, I beg to say that, in the case of small-pox that occurred in my own family, I am inclined to attribute the absence of all pitting to the timely application of the blistering fluid. Of course, it is impossible to say that any marks would have been left by the disease had that fluid not been applied; but, judging from the results left in cases of not greater severity that have come under my care, I am inclined to think there would have been marks."

The other case is that of a patient at the Skin Hospital, residing near that Institution, but whose occupation, that of beer-shop-keeper, would be injured by the publication of her exact address: I enclose her letter, however, from which the required extracts can be made, suppressing the name and residence:—

"I came to the Hospital for Diseases of the Skin; my case was small-pox; and I am thankful to your skill, which, under the blessing of Almighty God, has prevented my face being marked: my hands, arms, etc., are much searred, but my face is almost without a mark."

In conclusion, I may mention, that in two or three other instances, besides that of the patients above cited, I have had the satisfaction of finding that those pustules only have left pits which have escaped vesication by the above process; at the same time it must be borne in mind, that further experiments are needed to verify my experience, which is comparatively limited in this class of cutaneous ailments; I trust, therefore, that my brethren with wider opportunities than my own will give the method a full trial, and communicate the result to the Profession. Of course it can scarcely be deemed applicable to the severest cases, but in the distinct and partially confluent forms of small-pox I think it will be found to justify what has been herein stated. I am, &c.

3, Savile Row, February 11, 1857. JAMES STARTIN.

UTERINE HYDATID.

[To the Editor of the Medical Times and Gazette.]

SIR,—I send you a brief report of a case of uterine hydatid that came under my care. Should you consider it of sufficient interest, I should feel obliged by your giving it a place in your valuable journal.

Case.—Mrs. P., aged 35. A delicate looking woman. Has had six children in the last ten years. In February, 1856, complained of much debility, with occasional slight uterine hæmorrhages, and bearing-down pains. Towards the end of the month, she suddenly enlarged in size, and within a week was as large as she would have been at the seventh month, but felt no movements of a child. The bearing-down pains were more frequent, and the hæmorrhage rather increased.

I was sent for early on March 21st, as she was said to be in labour. Found the uterine pains rapid, with severe

(b) Hunter on the Blood, Vol. II. page 131, et seq., Vol. I. page 454

hæmorrhage. I passed my hand into the vagina, and found the os uteri only very partially dilated. As I could not pass my whole hand into the womb without using more force to dilate its mouth, and rather long neck, than I deemed prudent just then, I withdrew my hand, feeling certain that it was not a placenta presenting, but still rather doubtful what the soft mass might be, which I felt. Immediately after, a large mass of hydatids was expelled with a pain. In the course of a few minutes, smaller clusters were passed, and many single cysts about the size of a horse-bean. The cluster of cysts or watery vesicles exactly answered the description given by Dr. Ramsbotham in a paper in the *Medical Times and Gazette*, of February 26th, 1853. I presume at least three pints must have been passed altogether. The uterus then contracted as usual after labour, and the flooding ceased.

Severe febrile symptoms set in the day after. Much pain in the uterine region, and violent throbbing in the head, with occasional loss of consciousness. These dangerous symptoms yielded to treatment, but the debility was extreme, and some months elapsed before she regained strength sufficient to return to her usual employments.

I am, &c. W. B. SEALY, M.D.
Omata-Faranaki, New Zealand, October 2, 1856.

RAPID DELIVERY.

[To the Editor of the Medical Times and Gazette.]

SIR,—Allow me to mention a case of labour very similar to that recorded by Mr. Clough in your last number. It occurred in Edinburgh, about three years ago, and was accompanied with few pains, except in the early part of the first stage, and just at the birth of the child. It was, I think, the third labour, neither of the former having been attended with any remarkable circumstance. I was sent for about 6 a.m., and arrived in about half an hour, the distance being more than a mile. The woman had been seized with a desire to go to stool, and whilst there was no one in the room, had risen and made use of the chamber-pot. On rising to return to bed she felt a sudden pain, and the child was expelled and fell on the floor, the chord breaking short off at the placenta. No hæmorrhage occurred, and the placenta came away in about an hour after. The child sustained no damage from its fall, although the mother was a woman of good stature.

I am, &c. F. DE CHAUMONT, Rifle Brigade.
Aldershot, Feb. 18th, 1857.

PEPSINE.

[To the Editor of the Medical Times and Gazette.]

SIR,—As Pepsine is now attracting the notice of the Medical Profession both here and on the Continent, I think I shall be doing a public service in drawing your attention to a spurious kind which is now offered for sale, and which is, as I believe, manufactured in this country.

I propose, therefore, to point out the characters by which the genuine article may be recognised, and likewise those presented by the counterfeits, and also to describe the chemical tests by which they may be distinguished from each other. I have taken as the normal type, the preparation originally introduced by M. Boudault, the manufacturer in Paris, the preparation of which was described by him in a paper read before the Academy of Medicine. The process employed by him consists in treating the mucous membrane of the rennet-bag with distilled water, precipitating the pepsine by acetate of lead, and decomposing this precipitate by sulphuretted hydrogen. A solution of pepsine nearly pure is thus obtained, which is evaporated at a gentle temperature to a syrup, which is then mixed with starch, in such proportion that fifteen grains of the resulting mixture shall possess the power of digesting one drachm of dried fibrine. The preparation generally used contains, in addition, a small proportion of lactic acid.

The article which into the market by M. Boudault presents the appearance of a light fawn-coloured, somewhat cohering powder, possessing a peculiar odour and taste; when treated with cold distilled water, and filtered, an amber-coloured fluid passes through, while the starch remains behind. The spurious article, however, is a coarse white powder, without either taste or smell, and which, when treated with cold distilled water, partially gelatinizes, filters with great difficulty, and yields a solution perfectly colourless.

The insoluble matter which remains behind, when examined by the microscope, consists apparently of a mixture of starch and animal membrane, which may be readily separated by washing with water, the starch remaining in suspension, the membrane caking together, and sinking to the bottom. Let us now examine these solutions with different re-agents.

I shall, by way of distinction, call Mons. Boudault's preparation true pepsine, the other false.

True Pepsine.	Tests.	False Pepsine.
Abundant precipitate (peptate of lead.)	Acetate of lead.	Slight cloudiness.
Ditto.	Tannin.	Ditto.
(tannate of pepsine.)		

Precipitation of pepsine. Alcohol. No effect.

The solution of true pepsine is strongly acid, while the false is so only in a very slight degree; but more than all, M. Boudault's preparation does what it professes to do, 15 grains digest its drachm of dried fibrine, while the spurious compound is entirely destitute of this property. I am, &c.

277, Oxford-street, Feb. 19, 1857.

P. SQUIRE.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

FEBRUARY 10, 1857.

Mr. CÆSAR HAWKINS, President, in the Chair.

Mr. HENRY THOMPSON's observations on the ANATOMY AND PATHOLOGY OF THE ADULT PROSTATE

were read. The observations are based upon upwards of sixty dissections, fifty of which were preserved and exhibited, the latter having been examined on a uniform plan.

Mode of examination.—The organ has been clearly dissected from adjacent parts. At the neck of the bladder, the muscular and other fibrous structures which surround the vesical orifice of the urethra were pared away pretty closely; some portions may have been left, as it does not appear possible to mark any absolute limit between prostate and bladder; anteriorly, although the same condition exists, it is less difficult to determine, approximatively, a boundary line. It was then measured, in three directions, as follows: from base to apex; in the extreme transverse direction; and in the extreme recto-pubic direction. Next, it was weighed. After this, the urethra was laid open, the existence of "concretions" sought in the canal, and afterwards in various parts of the prostatic substance. In most specimens, free sections were made with Valentin's knife, and a series of microscopical observations pursued in normal and abnormal conditions of the organ, illustrated by about 100 specimens, mounted on slides, with preservative fluid. The greater part of these prostates were taken from the bodies of elderly persons, as they consecutively appeared in the dead-house of a large institution, containing a due proportion of healthy and diseased lives, and no kind of selection was made. The particulars of age, weight, and measurement, are arranged in tables exhibited. The observations made are presented under the following heads:—

I. *On the frequency with which enlargement appears in advanced age.*—The opinion has long been current that the enlargement of the prostate is one of the changes natural to old age. The specimens in question show the incorrectness of this view. Of the 50 specimens, 43 were taken from individuals of fifty years old and upwards. Of these 43, two were very small, probably atrophied, leaving 41. Of these 41, 14 exhibited enlargement, or a tendency thereto, manifested by the presence of tumour, more or less developed. Of these 14, 9 exhibited it in a very slight degree; in the remaining 5 enlargement was considerable, and gave rise to symptoms during life. Only one died of the affection.

Results, per cent.—An appreciable enlargement existed at the rate of 32 per cent.; notable enlargement, causing symptoms during life, at that of 12 per cent.

Of the 41 cases above fifty years of age, 29 were therefore unaffected in the slightest degree, and amongst them were the oldest individuals of the series—one at ninety, one at eighty-five, and two at seventy-nine years. It was then held to be established, that enlargement of the prostate, so far from being a change natural to old age, was an exceptional condition.

II. *The size and weight of the adult prostate.*—From the 50 cases of all adult ages, 14 being deducted as enlarged, and 3 as unnaturally small, 33 specimens remained healthy; the average weight of these was 4 drachms 38 grains; there was very little deviation, most of them ranging between 4 and 5 drachms.

Measurements.—Those given by authors generally were corroborated. The prevailing measurements were:—From base to apex, $1\frac{1}{4}$ to $1\frac{1}{2}$ inch; greatest transverse diameter, about $1\frac{3}{8}$ inch; greatest thickness, $\frac{5}{8}$ to $\frac{7}{8}$ inch; measurement from the centre of the urethra, outwards and downwards to the periphery of the organ, the line of section adopted in lithotomy, varied from $\frac{3}{4}$ to $\frac{7}{8}$ inch.

III. *On the nature of a part commonly called "the third lobe."*—The history of this term, and its employment to indicate a distinct portion of the organ, is discussed at some length. An examination of the preparations exhibited does not warrant its use. There is no portion marked out with sufficient distinctness to entitle it to such an appellation. Its existence appeared to have been the subject of discussion during some years in the course of the last century, long before the time of Sir Everard Home, the result of which was then a decided denial of its existence; Morgagni especially, after repeated examinations, strongly opposing its claim to be considered a distinct part of the healthy organ. It was proposed now to term the stratum of prostatic substance, which united the two lateral lobes behind and below the urethra, the "posterior median portion," as more correctly indicating the part referred to, and at all events as not involving assent to the disputable theory which assigned to it an independent character.

IV. *On the existence of distinct tumours in the prostate.*—The existence of solid tumours of different kinds is by no means rare in the prostate. They were pointed out by Sir E. Home, and by him supposed to be of the nature of apoplectic clots. Subsequently they have been regarded as fibrous tumours, and more lately it has been shown that some possess a structure approaching very nearly to that of the secreting tissue contained in the prostatic substance around. It is shown that enlargement of the prostate is very frequently associated with the development, more or less marked, of such growths in some one of three forms; in short, that the production of defined tumour is more frequently than otherwise the essential element of the pathological condition known as hypertrophy of the prostate. Of fourteen enlarged prostates in the series, six exhibited numerous fibrous tumours in the substance of the lateral lobes; the others show polypoid enlargements, single, binary, or multiple, springing from the posterior median portion. The varieties may be briefly noticed as follows:

1. A simple fibrous tumour, small, nearly isolated, made up of closely-packed organic muscular fibres, with some areolar tissue, intimately resembling those found imbedded in the walls of the uterus.

2. A tumour composed of the same elements as the preceding, but containing, in addition, some of the glandular substance of the prostate, more or less imperfectly developed. This also may be imbedded, with or without a cyst, seeming sometimes to partake more of the character of a local enlargement, limited to a small portion or lobule of the prostatic tissue, and only partially isolated. Although separating this class from the previous one for facility of reference, it is more than probable that the two nearly merge into each other at their adjacent limits, the latter approximating to the former by insensible gradations; so that some tumours which appear to be purely fibrous at first may be found to exhibit slight traces, in parts of its structure, of the glandular element. In all, however, the basis is *muscular fibre*.

3. A tumour composed entirely of the ordinary structures of the prostate fully developed, and enjoying activity of function in common with the rest of the organ. It assumes a pyriform shape even in its earliest stage, and springs from the posterior median portion. It may vary in size from that of a pea to that of a middle-sized pear. The analogies between these and the tumours of the uterus are considerable. Pointed out by Velpeau and others, modern researches seem to indicate them more plainly.

1. There is a ground of analogy derived from the two organs, prostate and uterus, being undoubtedly morphological equivalents in the two sexes, the analogue of the uterus and vagina combined being found in the prostatic vesicle or utricle of man. Numerous authorities are referred to in support of this view.

2. A stronger ground may be found in the fact, that the

prostate and uterus are organs whose bulk is constituted by the same tissue—viz., the organic muscular fibre. No other organ in the body besides these two is similarly constructed by thick masses of this tissue; elsewhere, it is distributed in very thin layers.

3. Both organs exhibit growths identical both in external and histological characters. Isolated tumours imbedded in the substance of the organ, and polypoid outgrowths intimately connected with its structure, are seen in both. The occurrence, in some prostatic tumours, of a very small proportion of partially-developed gland tissue, intermingled with the muscular basis, should be regarded rather as an accident of situation than as indicating any material difference between those and the purely muscular tumours.

4. The two organs are subject to considerable hypertrophic enlargement, mainly consisting of their constituent fibrous and muscular elements, and in both this may be associated with some tumour-formation, or may exist independently of it; may, in the latter case, be local or general, affecting the whole or certain parts of the organ, and, when local, affecting particular spots more commonly than others.

5. The two organs are liable to these changes after the prime of life has passed. Bayle, quoted by Rokitansky, and confirmed by Dr. Robert Lee, says that 20 per cent. of women, after thirty-five years, have fibrous tumours of some size in the uterus. These preparations show prostatic tumours in 30 per cent. of males after fifty.

The PRESIDENT said it was remarkable how little was formerly known of the anatomy of the prostate gland compared with the pathology; and he also inquired if Mr. Thompson was aware of the statement of Dr. Beith, in the Pathological Transactions, that enlarged prostates were exceedingly rare in very old persons.

Mr. SOLLY asked if Mr. Thompson, in speaking of enlargement in old age, excluded all tumours, or merely alluded to the hypertrophy of the organ.

Mr. THOMPSON said he was not aware that Dr. Beith had made any numerical statement, though he recollected that gentleman presenting some specimens of enlarged prostate early in the history of the Pathological Society. Of the 41 specimens referred to in his (Mr. Thompson's) paper, 14 were enlarged; of these 6 contained isolated tumours; the others being specimens of the ordinary kind of enlargement, commonly known as hypertrophy.

Mr. HUTCHINSON's paper on

A RECTANGULAR CATHETER-STAFF FOR LITHOTOMY

was then read. The main peculiarities of the instrument were its rectangular form and its catheter stem. The advantages of its form were, 1st, that it made the direction into the bladder straight, and thus obviated all danger of the knife leaving the groove; 2ndly, that the angle projecting prominently into the perinæum was more easily found than the curve of an ordinary instrument;



3rdly, that its groove commencing only at the angle, there was no chance of the urethra being opened too far forward, or the artery of the bulb being wounded; 4thly, that when once introduced it did not easily change position. Its being a *catheter as well as a staff* was important; 1st, because it allowed the surgeon to be quite certain of its being really in the bladder before commencing the operation; 2ndly, because it permitted of the bladder being injected without any change of instruments, and thus prevented the risk of the water escaping. It was provided with a stopcock. The author insisted strongly on the importance of operating with a full bladder and the dangers of its neglect, and believed that one great recommendation of his instrument was, that it would much encourage and facilitate the practice. Adverting to the causes of accidents in lithotomy, he stated, that of a series (nine) which had come under his notice during the last few years, chiefly in the practice of the London Hospitals, they had

been due to, 1st, the knife leaving the groove in the staff; 2ndly, the staff being at the time not really in the bladder; 3rdly, injury of the fundus of the bladder with the point of the knife; and expressed a strong opinion that the employment of the "rectangular catheter-staff" would have prevented them all. The instrument shown to the Society had a side groove, and was adapted for the use of any form of knife the operator might prefer. It had been made by Messrs. Fergusson, of Giltspur-street. It had been tried in the deadhouse a great number of times, and once upon the living subject, and always without any inconvenience. There was no difficulty whatever in its introduction. It was advised to be held in the usual way, moderately hooked up under the symphysis pubis, but by a slight movement of the handle its angle might be made to project more or less into the perinæum, according to the operator's wish. Mr. Hutchinson wished distinctly to state that he made no claim to originality of design. Dr. Buchanan, of Glasgow, had long ago recommended and used an angular staff for lithotomy, and more recently Mr. Fergusson had devised a grooved catheter for perineal section. The present instrument was merely a combination of the two principles. He believed, however, that it possessed in its catheter stem a very important advantage over Dr. Buchanan's, since it enabled the operator to ascertain with positiveness whether he was in the bladder. With instruments of the ordinary curve this is done by striking the stone, but as an angular one is very inconvenient for sounding it is liable, when made solid, to the objection that the surgeon might occasionally have to operate in uncertainty. The author also laid before the Society several other modifications of the angular staff which he had had made in the course of a long series of experiments as to the safest instruments for lithotomy. One of these had the groove beneath, and the knife adapted to it was a double cutting gorget, the beak of which was so made that when once placed it could not leave the groove. This he had once used on the living without inconvenience; but as it was liable to some objection, and as the side groove allowed of the operation being completed by a single knife and much simplified the apparatus, he had at length abandoned the principle which distinguished the former.

Mr. SPENCER WELLS said the rectangular staff had been described 8 or 9 years ago by Dr. Andrew Buchanan, of Glasgow, in a Scotch journal. That gentleman laid especial weight upon the point, that in his operation the staff should be pressed downwards, and not drawn upwards, so that the rectum, instead of being drawn into danger, might be pressed out of it. The projecting angle of the staff was brought very near the anus in the median line, and the forefinger of the left hand passed into the rectum to feel the apex of the prostate, taking care that the projecting angle was immediately in front of, and not behind, the prostate. Dr. Buchanan made a very different incision from that made in the ordinary lateral operation. The knife was passed into the groove of the staff, directly in front of the anus, and held horizontally, as if the operator were going to cut towards the tuberosity of the ischium, and in withdrawing the knife it was brought out downwards, so that the incision resembled one-half of the incision made by Dupuytren in his bilateral operation, except that it was much nearer the anus. In this way Dr. Buchanan considered that the rectum could not be injured. In his (Mr. Wells's) experiments on dead subjects, he had found that unless the assistant was careful, and the surgeon also, the angle of the staff was apt to slip into the bladder, and the prostate was pushed forwards towards the perinæum; and thus the bladder was opened either through the substance of the prostate or behind it, the old operation of cutting upon the gripe being thus performed. This was likely to take place unless great care was taken to feel with the forefinger in the rectum that the angle of the staff was made to rest exactly at the apex of the prostate; in fact, that the prostate was between the finger and the horizontal branch of the staff.

Mr. GAMGEE had seen Dr. Buchanan operate with the rectangular staff in the way described by Mr. Wells. He had seen Dr. Buchanan perform his sixteenth operation; and in this case, owing, apparently, to the rectum overlapping, as it were, the staff on either side, it had been wounded. He (Mr. Gamgee) had recently brought before the public the method practised by the Neapolitans, after Moreau, who held the staff in the left hand, and made the curve project in the left side of the perinæum, and kept it constantly pressed

towards the wound, opening the urethra at the apex of the prostate, and incising it to a very small extent.

Mr. ERICHSEN said that he thought Mr. Hutchinson's staff likely to prove of considerable value. He could give no opinion as to the merit of the rectangular shape, having had no experience of it, but he thought the combination of the catheter with the staff peculiarly valuable; it enabled the Surgeon to inspect the bladder without changing instruments, prevented the escape of the injected fluid, that was apt to ensue between the withdrawal of the ordinary catheter and the introduction of the staff, and would tend to prevent some of the accidents that might befall a Surgeon in lithotomy. Had he been provided with such an instrument an accident that had once occurred to him might have been avoided. A patient was sent to him with stone in the bladder, which was at once detected on sounding. When about to be cut the staff was introduced, apparently into the bladder, but no stone could be felt. A hollow sound, with a short beak, was then passed, and the calculus at once struck. The staff was again introduced, and, as it passed without difficulty of any kind, and the point could be felt on depressing the handle above the pubes, it was supposed by Mr. Erichsen and those assisting him, that it was in the bladder; but that, having a large curve, the stone probably lay in this. Mr. Erichsen proceeded to cut the patient, and, on opening the groove of the staff found it was not in the bladder. Having satisfied himself of this, he withdrew the staff, and passed the hollow sound, with which he had previously felt the stone, cut upon this, and extracted a large calculus. The patient unfortunately died, and after death three old false passages were found leading from the urethra into the abdominal space, and by the side of the bladder. It was into one of these that the staff had passed, but the sound being larger, and having a short beak, escaped it, and entered the bladder. Now, had the staff been hollow, as in Mr. Hutchinson's instrument, such an event could at once have been recognised by the non-escape of urine. Since this case had occurred, Mr. Erichsen had heard of several instances in which a similar accident had happened. This led to the inference that the proper rule of practice should be, to feel the stone with the staff rather than with a sound when the patient was on the table. He did not know whether the use of the hollow staff in perineal section originated with Mr. Fergusson or Mr. Thompson, but he had used the instrument with great advantage during the past twelvemonths.

Mr. J. CLOVER said he had adopted the plan, also suggested by Mr. Henry Thompson, of injecting two or three drachms of olive oil, whenever he anticipated any difficulty in passing the instrument.

Mr. HENRY THOMPSON did not know who was the first to employ a grooved staff for cutting the perinæum. He used it a twelvemonth ago, and certainly preferred it to the plain staff. He employed it in connexion with Syme's shoulder-staff, allowing the groove to run through, so that if there was any doubt as to whether the instrument was in the bladder, it could be at once set at rest by turning the tap, and allowing the urine to flow. The injection of oil, to the extent of half an ounce or an ounce, he had found of much greater service than oiling the instrument.

The Society then adjourned.

THE PATHOLOGICAL SOCIETY.

TUESDAY, February 3.

Dr. WATSON, President, in the Chair.

(Continued from page 179.)

Mr. BIRKETT brought before the Society two specimens of DIFFERENT FORMS OF ADENOCELE.

In one case a small mammary glandular tumour had been removed from the breast of a young woman, in whom it had commenced to grow at the age of sixteen. The tumour was solid, and consisted of very perfect gland tissue, wanting only the efferent ducts. The second had been removed by Mr. Teale, of Leeds, from the breast of a lady, aged 56, the mother of eleven children, who had ceased to menstruate fourteen years ago. It had grown rapidly. It consisted of a cyst

of some size, containing fluid, and large masses of intracystic growth. The solid structure showed the elements of gland tissue loosely formed, and wanting the due proportion of connective membrane. The latter was a good illustration of Sir Astley Cooper's "Cysto-sarcoma," and the former of the "Chronic mammary tumour;" yet both were proved by the microscope to be the same structure. Mr. Birkett drew attention to the difference in age of the patients; the difference in rapidity of growth in the two tumours, &c.; remarking that the only difference in elemental constitution, was the substitution of surrounding fluid, in the one case, for the developed fibrous or connective tissue binding together the gland acini of the other. Might this serous fluid be regarded as the plasma from which the fibrous tissue ought to have been developed, had the rate of growth been slow enough to permit of it?

Mr. HOLMES showed a

HAIR-PIN REMOVED FROM THE FEMALE BLADDER.

A young married woman had passed a hair-pin of the usual bent form into the urethra, and three weeks later consulted a Surgeon respecting it. Mr. Faithon, of Chesham, under whose care she came, succeeded in removing it with forceps without any previous incisions or dilatation of the urethra. It was much bent in removal. It came out thickly crusted with phosphates. She recovered quickly, and no inconvenience remained.

Dr. BRINTON exhibited a specimen of

COLLOID CANCER OF THE OMENTUM.

An elderly lady had died, as was supposed, of cancer of the liver. She had been much distressed by vomiting, but no hæmatomesis had occurred. The liver had been felt enlarged, but there was also a distinct tumour below it. The autopsy showed colloid cancer in the liver, and also in the omentum.

Dr. WILKS mentioned a case of

CARCINOMA OF THE STOMACH UNDERGOING A CURE.

Martin F., aged 65, was admitted, under Dr. Gull's care, into Guy's Hospital, on August 6, 1856, and died November 24. For a year before admission he had suffered from vomiting, and other gastric symptoms, accompanied by great emaciation, indicative of an obstruction at the pylorus. He was so weak that he was obliged to be placed in bed, and he appeared as if he could not survive many days. A tumour was felt at the pylorus. He took but little food, and this, in part, remained down. After the expiration of three or four weeks the vomiting was less urgent, so that he soon was able to pass several days without any sickness at all. After this his condition was tolerably uniform; he did not improve in general health, although he did not retrograde. The nourishment he took was small in quantity, but remained on his stomach, and at the same time the pyloric tumour was less distinct; in fact, fresh visitors to his bed-side were unable to detect it. He died at last rather suddenly.

The post-mortem examination showed a recent pleurisy as the immediate cause of death. There was no other disease in the body, except that of the stomach. Some large glands were seen occupying the lesser curvature, and the pylorus felt hard, and, in fact, constituted a tumour, owing to the neighbouring tissues being adherent to it. On opening the stomach the little finger could be passed through the pylorus. The walls were not thicker than usual, although diseased; the coats were blended together, and amongst them was a yellow, amorphous material, which was, probably, dead cancer. Two of the enlarged lymphatic glands in the lesser curvature, each of which was about the size of a walnut, contained a soft semi-fluid material, such as is seen in decayed exudations, particularly cancer. In a third gland some true encephaloid matter was found; this emitted a milky juice, and showed large nucleated cells beneath the microscope. In the midst of it, however, was some degenerating structure, as in the others, which sent out radiating streaks throughout it; so that it was very clear that in a short space of time, even his remnant of cancer would have disappeared; and then the question would have arisen as to the nature of the gastric disorder from which this man had died. It was tolerably certain that this case exemplified the instance of a man who had been suffering from cancer of the stomach for the usual period, and that

then being placed under different circumstances (to say nothing of medicine), the disease not only ceased to grow, but the morbid deposit which already existed began to decay. A relief to the symptoms followed, and an unexpected prolongation of life. Should this result have been due only to the man's feeble powers, which were unequal to the formation of new structures, it would show that cancer may sometimes be starved out.

Dr. WILKS also mentioned a case of

GREAT ENLARGEMENT OF THE HEART WITHOUT VALVULAR DISEASE.

Charles G., aged 45, was admitted, under Dr. Wilks' care, into Guy's Hospital, in December, 1856. He had had good health until about three months before, when he began to experience oppression at the chest and difficulty of breathing. These symptoms increased until swelling of the legs came on, and, on admission to the Hospital, he had all the appearance of a man labouring under advanced heart disease. From the extreme fatness of the patient, the cardiac sounds were with difficulty heard, but no bruit was audible, while the systolic sound was slightly double. Hæmoptysis came on, and other symptoms of severe pulmonary apoplexy; and the man died about a month afterwards. The body presented the usual appearance of death by heart disease. While the heart itself was very much increased in size, weighing above a pound and a half, its form was normal, as the due proportion was maintained between its several parts, but there was no valvular disease. The muscular structure was slightly fatty, and the coronary arteries were excessively diseased, as were also the small arteries in other parts of the body. This case is an example of a class occasionally met with of great enlargement of the heart without valvular disease: in the present instance the morbid condition of the small vessels may in all probability be considered as having been productive of an obstruction in the arterial system, the impediment to the circulation being at the periphery instead of at the trunk, and so leading to the usual consequence on the heart itself.

Dr. GRAILY HEWITT mentioned a case of

EXTENSIVE DISEASE OF THE KIDNEYS,

from a case in which death was preceded by puerperal convulsions. The case from which the specimens exhibited were taken was one of considerable interest. A woman, aged 26, was seized 12 hours after delivery with dimness of vision, and quickly following convulsions, the attack of convulsions leaving behind it coma of a peculiar character. Convulsions occurred at intervals of about half an hour to an hour for the next twelve hours. Death took place 16 hours after the first attack, and 28 hours after the birth of the child. The left kidney was found exceedingly atrophied, weighing only 170 grains.

The right kidney exhibited an advanced condition of that known as granular fatty degeneration. Its weight was 8 ounces. Cortical substance atrophied, of a dull yellowish white colour, with red striæ consisting, apparently, of enlarged veins. Tubular substance also atrophied, paler than usual. Texture of kidney, very loose and flabby. Urine, bloody and albuminous, was found in the bladder. Valves of heart somewhat thickened. Walls of left ventricle about one-third thicker than normal; in places, much exceeding this measurement. Endocardium thickened, opaque, and of a dull yellow colour. The woman had lived for some time under great privations. It was afterwards ascertained that the lower extremities had been anasarca six weeks before death. In several respects the case was interesting, and the more so as the pathology of puerperal convulsions is confessedly, even at the present day, somewhat obscure.

NORWICH PATHOLOGICAL SOCIETY.

DONALD DALRYMPLE, Esq., President.

STRICTURE OF THE RECTUM.

Mr. FRANCIS (Norwich) exhibited a specimen of stricture of the rectum, taken from a lady aged 34. The disease extended over a period of thirteen months from the discovery of the stricture, and was indicated by occasional slight bleeding after the action of the bowels, progressive constipation, pain, and, during the latter period of the disease, great ab-

dominal distension. When the finger was introduced to the full extent, a nipple-like projection was felt, in which was a small orifice, about the size of a goose quill. With some difficulty a No. 10 male catheter was passed through the stricture. The treatment consisted of mild aperients, tonics, enemata, and careful attempts to dilate the stricture; the spasmodic contraction of the sphincter and opposed greatly the use of instruments and requisite manipulation. This was freely divided, and larger bougies were used with greater ease; gradually, however, the symptoms became aggravated; strength failed; emaciation followed; the stricture narrowed till scarcely any relief from the bowels could be procured; the abdomen became greatly distended, and death now ensued. The rectum was found healthy for about $2\frac{1}{2}$ inches above the anus; for $3\frac{1}{2}$ inches above this point the bowel was indurated, thickened, and excessively constricted; above this, again, the bowel was healthy for a short distance, but instead of rising out of the pelvis in the ordinary manner it curved downwards, became connected with the strictured portion, and so narrowed it at a second point as barely to admit a No. 12 bougie. Under the microscope the disease was clearly ascertained to be malignant, although serious doubts were expressed on this point both during the life of the patient and after death.

AMPUTATION OF TONGUE BY AN ACCIDENT.

Mr. NORGATE (Norwich) detailed the case of a young man, aged 20, whose face was crushed by a wagon wheel. He received a compound fracture of the lower jaw, and the tongue was nearly severed at its base by the sharp edge of bone. When brought to the Hospital the tongue was found attached by merely a few shreds of membrane, and nothing was left but to remove it; there was free but not troublesome hæmorrhage; articulation was impossible for a time, and deglutition was difficult. He gradually recovered, and when he left the Hospital speech was so far restored that he could be understood without trouble.

THREE INJECTED SPECIMENS FROM THE EYE.

Dr. WEBB (Lowestoft) exhibited, 1. An injected specimen from a human fœtus of five months of posterior view of the entire membrana pupillaris *in situ*, with the lens removed. 2. A vertical section of the corresponding eye, showing looped vessels of the membrana pupillaris passing to it over the anterior margin of iris. 3. Detached capsule of the lens, with vessels spreading from pole to pole of the lens, and in connexion with another preparation of the same eye, verifying the commonly received opinion of the existence of this membrane as a distinct structure closing the pupillary aperture. These preparations were presented in consequence of Professor Quekett having unsettled the question as to the true character of this part, and to negative the assertion advanced in his Histological Lectures, Vol. I. p. 131, that "at one stage of development of the lens the whole capsule is covered with vessels, and, if it should so happen in the course of the dissection that the anterior layer be detached from the posterior, the anterior layer would be described as the membrana pupillaris; but if the lens came away entirely covered with vessels no such membrane is found."

CALCULUS AND DISEASE OF KIDNEY.

Mr. GIBSON (Norwich) exhibited a specimen of hypertrophy of the left kidney. The organ weighed 2 lbs. 2 oz. The right kidney was not so large, but was affected with fatty degeneration; the bladder was not unhealthy, and contained two small calculi. Prostate gland enlarged.

DISLOCATION OF WRIST-JOINT.

Mr. CADGE (Norwich) exhibited a cast of an unreduced dislocation of the wrist of twenty years' duration. The bones of the forearm rested on the back of the carpus, and every prominence and groove of the radius was so obvious as to leave no doubt of the nature of the injury.

POOR-LAW MEDICAL REFORM.

GUY'S HOSPITAL.—On Tuesday, February 17, a meeting of the students of Guy's Hospital was held, J. Foster Gray, Esq., in the chair, when the following Resolutions were unanimously carried:—1. Proposed by Mr. Skinner, and seconded by Mr. Jones,—That this meeting expresses its cordial sympathy with the movement set on foot

by Mr. Griffin in favour of Poor-law Medical Reform. 2. Proposed by Mr. Berkeley, and seconded by Mr. Carey,—That, in the opinion of this meeting, the present scale of remuneration to Poor-law Medical officers is utterly inadequate compensation for the important services they are called upon to render; and further, that until some fundamental reform is effected in the present system of their election, no satisfactory remedy for the grievance can be obtained. 3. Proposed by Mr. Maynard, and seconded by Mr. Whitefield,—That this meeting is ready energetically to co-operate with the Poor-law Medical Reform Association in its efforts to procure redress. 4. Proposed by Mr. M'Dougal, and seconded by Mr. Rengifo,—That this meeting records its unqualified disapprobation of the ungentlemanly conduct of those selfish individuals who, regardless of the interests of the Profession, ungenerously accept Poor-law appointments manfully vacated on principle by their Professional brethren. 5. Proposed by Mr. Durham, and seconded by Mr. Kelland,—That this meeting expresses its conviction of the inutility of an aggregate meeting of Medical students until the earnest co-operation and support of the senior members of the Profession is secured. 6. Proposed by Mr. Galton, and seconded by Mr. Broad,—That a Committee be formed of the following gentlemen:—Mr. Skinner, Mr. Scott, Mr. Brookhouse, Mr. Durham, and Mr. Maynard; and that a shilling subscription be raised for the furtherance of the objects of the above Resolutions. 7. Proposed by Mr. Brookhouse, and seconded by Mr. Baker,—That Mr. Durham be appointed Treasurer, and Mr. Maynard Honorary Secretary to the Committee; and that these gentlemen be empowered to represent the Students of this Hospital in co-operating with the delegates from other Hospitals in furtherance of the objects of the Poor-law Medical Reform Association. At the conclusion of the meeting a vote of thanks was passed to Mr. Gray, for the able manner in which he had conducted the proceedings; proposed by Mr. Rengifo, and seconded by Mr. Durham.—FORSTER MAYNARD, Honorary Secretary.

ST. BARTHOLOMEW'S.—A meeting of the Students of St. Bartholomew's Hospital was held on Tuesday last for the purpose of supporting Mr. Griffin's movement; Mr. Chippendale in the chair. The following Resolutions were then adopted:—1. Proposed by Mr. Barford, and seconded by Mr. C. Smith,—That this meeting tenders its best thanks to Mr. Griffin for his able and unwearied exertions in the cause of Poor-law Medical Reform. 2. Proposed by Mr. G. Reed, and seconded by Mr. Dixon Adams,—That this meeting pledges itself to support the movement commenced by Mr. Griffin, and resolves upon its best endeavours to promote the reform of the present iniquitous system. 3. Proposed by Mr. R. Goodall, and seconded by Mr. Heelas,—That this meeting desires to express its disapproval of the conduct of those members of the Profession who, regardless of its dignity and interest, have hitherto treated this movement with apathy and indifference. 4. Proposed by Mr. Chalk, and seconded by Mr. Oldham,—That the present system of vesting the power of appointing Union Medical officers and fixing the scale of their remuneration in the hands of the Board of Guardians is viewed by this meeting with the greatest disapprobation. 5. Proposed by Mr. Russell, and seconded by Mr. Daniels,—That this school is of opinion that an aggregate meeting of the students of the metropolis should be held, and it therefore appoints two delegates to confer with the representatives of the other Hospitals. 6. Proposed by Mr. Muskett, and seconded by Mr. Linacre,—That, in order to carry out the objects of this Association, a subscription should be at once commenced to defray the necessary expenses. Mr. Barford and Mr. G. Reed were then chosen to represent the school. Mr. Chippendale was elected chairman, Mr. Daniels, treasurer, Mr. Russell, hon. secretary. The proceedings terminated with a vote of thanks to the Chairman, for the able manner in which he had conducted the business of the meeting.

LIVERPOOL INFIRMARY.—At a general meeting of the Students of the Liverpool Royal Infirmary School of Medicine, held on Wednesday, February 4th, 1857, for the purpose of supporting Mr. Griffin's movement, A. Brooke George, Esq., in the chair, the following Resolutions were proposed and carried unanimously:—1. Proposed by Mr. Roskell, and seconded by Mr. Callen,—That the thanks of this meeting are especially due to R. Griffin, Esq., for his unwearied exertions in the cause of Poor-law Medical Reform.

2. Proposed by Mr. A. Long, and seconded by Mr. Williams,—That this meeting, viewing with regret and indignation the injustice and oppression which Union Medical officers now suffer, deems it expedient that prompt and decisive support should be given to the movement already set on foot by R. Griffin, Esq., which movement this meeting considers will be the most effectual means of obtaining redress, if supported by the Profession at large. 3. Proposed by Mr. Campion, and seconded by Mr. J. H. T. King,—That the present system of supervision of Poor-law Medical officers by persons not conversant with either medicine or surgery ought to be amended by appointing a Medical Inspector on the Poor-law Board, to whom would be referred all charges of a purely professional character. 4. Proposed by Mr. Thompson, and seconded by Mr. E. Stokes Roberts,—That this meeting earnestly urge their brother students in the United Kingdom to join in pledging themselves that on the completion of their studies they will not accept any appointment as Union Medical officers until a more equitable adjustment of salaries has taken place. 5. Proposed by Mr. Finegan, and seconded by Mr. J. Robinson,—That, in order to carry out the objects of the meeting, a Committee be formed, consisting of the following gentlemen:—Mr. A. B. George, chairman; Mr. Roskell; Mr. H. G. Rawdon; Mr. E. Stokes Roberts; Mr. A. Long; Mr. J. H. T. King, hon. treasurer and secretary. The business of the meeting was concluded with a vote of thanks to Mr. A. B. George, for his able conduct in the chair.—J. H. T. KING, hon. treasurer and secretary, Royal Infirmary, Liverpool.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS.—FRIDAY, FEB. 13.

LUNATIC ASYLUMS, IRELAND.—Colonel Dunne obtained leave to bring in a Bill to amend the law relating to the appointment of officers and management of Lunatic Asylums in Ireland.

MONDAY, FEB. 16.

VACCINATION.—In answer to Mr. DUNCOMBE, Mr. COWPER said it was intended this year to bring in a Bill upon the subject of vaccination.

TUESDAY, FEB. 17.

MEDICAL REFORM.—Mr. HEADLAM gave notice that on Thursday he would ask leave to introduce a Bill to amend the laws relating to the Medical Profession.

WEDNESDAY, FEB. 18.

The Public Health Supplemental Bill was read a second time.

THURSDAY, FEB. 19.

SURREY COUNTY LUNATIC ASYLUM.—MR. SNAPE'S CASE.

Mr. OTWAY asked concerning the re-appointment of Mr. Snape to the medical charge of the Surrey County Lunatic Asylum, and the correspondence which had ensued.

Sir G. GREY said that, in consequence of the criminal prosecutions against Mr. Snape, that gentleman was suspended, and when the grand jury ignored the bill, the suspension was taken off. Mr. Snape was never dismissed, and consequently there was no re-appointment. He had no objection to the production of the correspondence which had taken place.

CONGRESS OF OCULISTS AT BRUSSELS. — Brussels has of late become famous for its congresses on educational and statistical questions; and now we find one proposed for the ophthalmologist. They are invited by a Committee composed of the following members:—MM. Fallot, Bosch, Hairion, Van Roosbroeck and Warlomont. It is intended that the meetings should take place on the 13th, 14th, 15th, and 16th of September next, *i. e.* immediately prior to that of the German Scientific Association, to be held this year at Bonn, on the 18th. Besides various other topics which will be brought under discussion, Military Ophthalmia, and the employment of the Ophthalmoscope, are to hold prominent places. All communications favourable to this project are to be addressed to M. Warlomont, 27, Rue Notre Dame aux Neiges, Brussels.

POPULATION OF FRANCE IN 1856.—According to the census of 1856 there are in France, 17,870,169 males; 18,169,195 females; total, 36,039,364. The increase during the quinquennial period of 1851-6 has been 75,210 males; 180,984 females; total 256,194.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, February 12.

GRAHAM, JAMES, Newsham, Yorkshire.

SMITH, FREDERICK HENRY, Blackheath-road, Greenwich.

VERCHERE, ALBERT MARC, Geneva, Switzerland.

DEATHS.

BATESON.—Feb. 12, John Thomas Bateson, Esq., Surgeon, of Lancaster, M.R.C.S.E., 1826; L.S.A., 1825; Senior Surgeon to the Lancaster Infirmary. Mr. Bateson's death was occasioned by a lamentable accident on the North Western Railway. He was proceeding to Settle by train, for the purpose of seeing a patient. Having done so, he engaged a fly to the Settle Railway Station, to return to Lancaster. He had to cross both lines of rails to get on the downside platform, and did not observe the near approach of the train. The deceased was knocked down, and the carriages passed over him. His right foot was cut off, several of his limbs fractured, and there was a severe scalp wound. He died between 11 and 12 o'clock the same night.

SMITH.—Feb. 13, at Percy Street, Bedford Square, in his 79th year, Richard Smith, Esq., Surgeon, late of Chertsey, Surrey, where he practised (firm of Smith and Eady), universally respected and esteemed, for 50 years. M.R.C.S.E., 1801. The deceased was the father of Mr. Albert Smith, of Mont Blanc notoriety.

STRAKER.—Recently, Dr. Straker, C.B., Physician-General to the Bombay army. The *Times'* India correspondent in his last letter, says:—"While I write I hear the 'Dead March' in *Saul*, and the tramp of the funeral party attending his remains to the grave. The deceased officer, who had been upwards of 33 years in the service, served in the Sikh campaign of 1848-49 as Superintending Surgeon of the Bombay column of the army, and was present at Mooltan and Gujerat."

APPOINTMENTS.

J. WYATT CRANE, M.D., M.R.C.P.L., Physician to the Leicester Infirmary and Fever House, has been appointed one of the Honorary Physicians to the Leicestershire and Rutland Lunatic Asylum, on the resignation of Dr. Noble.

LONDON FEVER HOSPITAL.—The annual meeting of governors took place on Friday, at the Freemasons' Tavern; Lord Monteagle in the chair. This enarthy has lately had great demands upon it; no less than 1,761 patients were admitted to its wards during last year. The annual report was read, from which it appeared that the expenditure for the last year had exceeded the income by £132 14s. 3d. From the medical report it appeared that the total admissions during the year had been 1,761, in addition to the 121 remaining at the close of the preceding year, the admissions exceeding the latter by 735. The cases comprised 1,061 typhus, 149 typhoid, and 183 scarlet. Out of the whole number 1,483 recovered, 289 died, and 94 remained under treatment. The total number admitted since the establishment of the hospital was 29,172, but the admissions for 1856 exceeded by several hundreds those of any former year; but the mortality averaged only 15 per cent., while in 1855 it was 17 per cent.

MICROSCOPICAL SOCIETY OF LONDON.—Mr. Blenkins. Surgeon of the Grenadier Guards, was elected Honorary Secretary conjointly with Mr. Quekett, at the annual meeting on the 12th inst.

ROYAL LONDON OPHTHALMIC HOSPITAL.—The annual general meeting of the governors of this noble charity was held at the hospital on Monday last, Mr. Labouchere in the chair. The report showed that the recent enlargement and improvement of the hospital, which have been effected at a cost of nearly £2,500, had been met by special and other recent subscriptions, and that the number of admissions during the past year was 10,665, being an increase of 568 patients during the year. A number of resolutions were passed, one conveying a testimonial to Dr. Farre, the consulting physician, who has been for more than 50 years identified with the interests of this institution. The Right Hon.

Sidney Herbert, M.P., and the Lord Mayor for the time being were appointed vice-presidents, and Miss Nightingale an honorary life-governor; after which several emendations in the rules were proposed and agreed to, when the meeting separated.

ST. MARK'S HOSPITAL.—On Thursday the twenty-first annual meeting of the governors of this Hospital was held at the London Tavern. The report stated that the income for the year, including £420 7s. 4d. in subscriptions and £963 3s. 8d. in donations, amounted to £1,745 6s. 2d., and the expenditure to £1,808 19s. 6d., showing a balance of £63 13s. 4d. against the charity. The following is the surgical report from the 1st of January to the 31st of December, 1856:—Patients admitted suffering from fistula, prolapsus, and other diseases of the rectum, 695, of whom were discharged cured, 349; materially relieved, 218; considered incurable, 10; for irregularity of attendance, 12; died, 3; remaining on the books, 103—695. Patients received since the foundation of the Hospital to Dec. 31, 1855, 9,563—total number to Dec. 31, 1856, 10,258. There was in all subscribed in the room £580.

INFLUENCE OF TEMPERATURE ON MORTALITY.—In reference to certain classes of disease, the following table, supplied by the Registrar General, is of great interest, showing the deaths in London in 10 cold and 10 warm days.

	Other Diseases.		Brain Diseases.		Heart Diseases.		Bronchitis, and other Lung Diseases.		Consumption.		ALL DISEASES.		AGES.
	10 cold days.	10 warm days.	10 cold days.	10 warm days.	10 cold days.	10 warm days.	10 cold days.	10 warm days.	10 cold days.	10 warm days.	10 cold days.	10 warm days.	
	450	358	69	73	1	1	225	176	4	4	755	612	0—
	33	33	2	2	2	4	2	6	5	5	49	50	5—
	36	24	5	1	4	4	4	2	17	13	67	48	10—
	75	88	6	12	19	12	36	27	71	75	248	210	20—
	87	69	29	36	20	12	83	71	54	13	299	242	40—
	123	102	57	41	26	17	128	90	1	1	347	261	60—
	58	51	1	7	1	1	10	22	—	—	79	82	80 and upwards
	867	725	170	172	73	51	502	394	232	163	1844	1505	Total.....

The mean daily temperature of 10 cold days was 51°-1.
The mean night temperature of 10 cold days was 46°-9.
The mean daily temperature of 10 warm days was 53°-6.
The mean night temperature of 10 warm days was 46°-9.

The general result is that the deaths in London during 10 cold days were 1844, while the deaths in the 10 warm days were 1505; the excess of deaths in the cold days was nearly 34 daily. Under 5 years of age the mortality was increased by cold one-fourth; at the age of 5—10 there was no increase; at 10 and under 20 the increase was one-third; at 20—40 one-sixth; at 40—60 one-fifth; at 60—80 one-third; at the age of 80 and upwards no effect appears to result from cold temperature.

BIRTHS AND DEATHS IN AUSTRALIA.—The number of births registered in the colony during the last ten years—viz., from 1846 to 1855 inclusive—was 40,590 males, 29,432 females. The proportions of the respective sexes in each 10,000 births were, in ten years, 5,072 males, 4,928 females. The deaths registered during the same period numbered 18,429 males, 12,368 females. The average mortality of males during 1851 to 1855 was 1 to 61; that of females 1 to 66. The nett gain to the population by the excess of births over deaths was,—

	1846-50.	1851-55.	Total.
Births	35,614	44,408	80,022
Deaths	11,883	18,914	30,797
Excess of births.	23,731	25,494	49,225

The number of births, deaths, and marriages in the colony last year averaged daily—births, 28; deaths, 11; marriages, 8.

MORTALITY NOTABILIA.—The deaths registered in London in the week that ended on Saturday were 1264, and exhibit a decrease on those of the preceding week, when they were 1368. In the ten years 1847—56 the average number of deaths in weeks corresponding with last week was 1135. But as the deaths in the present return occurred in an increased population, it is necessary for comparison that the average should be raised in proportion to the increase, in which case it will become 1249. The rate of mortality last week was therefore very near the average rate in the second week of February. The decrease on the previous week, amounting to about 100 deaths, is referable in a principal degree to a diminished mortality from pulmonary diseases. The mortality from zymotic diseases in the aggregate was not high, as compared with the corrected average of corresponding weeks; but it will be seen that hooping-cough was much more fatal than any other disease in that class.

BIRTHS.—The births of 947 boys and 904 girls, 1851 children, were registered. Average, 1550.

METEOROLOGY.—The mean height of the barometer in the week was 29.837 in. The highest reading in the week was 30.25 in., and occurred on Thursday. The mean temperature of the week was 40.9°, which is about 9° or 10° higher than that of the two previous weeks, and 2.4° higher than the average of the same week in 43 years. The highest temperature obtained in the week was 52.2° on Wednesday. The lowest occurred on Friday, and was 31.0°. The range of the week was 21.2°. The mean dew-point temperature was 35.2°, and the difference between this and the mean temperature of the air was 5.7°. Wind, south-west. Rain, 0.09 inches. Horizontal movement of air, 235 miles. Electricity, positive, with variable tension.

DEATHS IN PUBLIC INSTITUTIONS for the Weeks ending Saturday, February 14:—

	Males.	Females.	Total.
Workhouses	68	79	147
Prisons .. ..	..	..	..
Military and Naval Asylums	5	..	5
General Hospitals	20	14	34
Hospitals for Special Diseases	4	4	8
Lying-in Hospitals .. ..	..	..	..
Military and Naval Hospitals	1	..	1
Hospitals for Foreigners, etc.	1	..	1
Lunatic Asylums	3	7	10
Total	102	104	206

The following are the number of Deaths from Small-pox, Measles, Scarlatina, Hooping-cough, Diarrhoea, and Typhus in the several Districts of London, for the past Week:—

	Popula- tion.	Small- pox.	Measles.	Scar- latina.	Hoop- ing- Cough.	Dia- rrhoea.	Ty- phus.
West.....	376,427	1	4	3	14	2	5
North	490,396	2	8	8	6	2	8
Central ..	393,256	..	1	..	14	2	8
East.....	485,522	..	2	11	17	4	12
South	616,635	..	5	8	19	3	7
Total..	2,362,236	3	20	30	70	13	40

DEATHS REGISTERED in the Metropolis for the Week ending
Saturday, February 14, 1857.

CAUSES OF DEATH.	In the Week ending Saturday, Feb. 14, 1857.						Averages of Temperature and Deaths in 10 Weeks.
	Deaths of Persons.						
	AT ALL AGES. Mean temp. 40°·9	Under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.	At 80 Years of Age and Upwards.	
Mean Temperature	40°·9						37°·2
ALL CAUSES	1264	537	167	248	250	55	1135·0
SPECIFIED CAUSES	1257	537	167	248	250	55	1127·6
DISEASES:—							
1. Zymotic Class	213	165	20	14	11	3	230·7
2. Dropsy, Cancer, and others of uncertain seat	51	3	9	22	13	4	46·7
3. Tubercular Class	222	74	82	61	5	..	182·8
4. Of Brain, Nerves, etc. ..	138	65	11	25	32	5	131·4
5. Of Heart, etc.	65	2	12	24	24	3	43·7
6. Of Respiratory Organs ..	307	105	19	71	100	12	249·5
7. Of Digestive Organs ..	66	30	4	9	22	1	59·9
8. Of Kidneys, etc.	19	1	3	9	6	..	13·1
9. Of Uterus; viz.—Puer- peral Disease, etc. ..	6	..	4	1	1	..	10·4
10. Of Joints, Bones; viz.— Rheumatism, etc. ..	9	5	1	3	..	..	7·6
11. Of Skin, etc.	5	2	1	2	..	..	2·3
12. Malformations	4	4	..	..	..	..	3·9
13. Debility from Premature Birth, etc.	27	26	..	1	..	..	29·5
14. Atrophy	43	36	..	1	6	..	25·7
15. Age	57	..	..	..	30	27	50·7
16. Sudden	1	1	..	..	..	..	10·2
17. Violence, Privation, etc. ..	24	18	1	5	..	..	29·5
CAUSES NOT SPECIFIED ..	7	..	..	..	..	..	7·4

TO CORRESPONDENTS.

Antiquary.—Oliver Goldsmith and Tobias Smollett both belonged to the Medical Profession, but they did not practise it long or successfully.

Mr. Barton.—The “juice of cursed hebenon,” mentioned by Shakspeare, is supposed to be the essential oil of tobacco. Tobacco was once called *henchon*, or *henbane* of Peru, and by metathesis this word became *hebenon*.

Anxietas.—The prolapsus ani of young children is a very manageable affection, and seldom requires the use of any instrument. It is often induced in such patients by straining at stool, and it may often be remedied by the use of the bed-pan placed beneath the anus on the bed, instead of effecting the evacuation in the usual sitting posture. An injection of cold water, or one containing muriated tincture of iron, will also be found very useful.

R. B. B.—The affection in question is quite curable under proper Medical treatment. We know nothing of the person mentioned; his name does not appear in the London and Provincial Medical Directory, nor in any of the authorized lists published by the various Colleges and Universities.

Rusticus.—It is not an uncommon practice among London Physicians and Surgeons to decline fees from certain patients, who, although moving in a respectable sphere, are not blessed with too large a portion of this world's goods. We believe that, of all the learned Professions, our own is singular in this respect.

THE END OF THE SANATORIUM.

The following Advertisement has appeared in the *Times*:—

“To the Medical Profession and Hydropathists.—To be sold, or let on lease furnished, the Jacksonian Sanatorium, the proprietor retiring into private life. This delightful freehold is equally adapted for Allopathy or Hydropathy patients. The mansion stands in its own grounds, about 4½ acres, beautifully laid out; is capable of being enlarged to hold any number of patients. The dining hall is spacious, good reception rooms, and a large number of excellent bed-rooms, fine bath-house, good plunges and douches, with dressing-rooms, good coach-houses and stabling; beautiful spring and New River water, with hot and cold water laid on through the house. Omnibuses to and from London several times a day. Gravelly soil. Address, Mr. B. W. Jackson, Fortis-green, near Highgate-hill.”

We have received the account of the Coroner's Inquest which took place at Banbury; but, on a careful review of all the circumstances, we have come to the conclusion that the evidence of poisoning is too slight to render the case one of general public or Medico-legal interest.

Mr. Hewitt has not stated whether his attendance was voluntary or compulsory—whether he was called on a matter of fact or of opinion.

Mr. Fox.—The postscript shall be appended.

Mr. Jones's request has been attended to.

Mr. Raynes.—We shall be happy to see the paper.

Mr. Green.—The elastic belts and air-pad are not so suitable for children as the spring truss and solid pad. The latter is more likely to effect a radical cure.

H. S.—By his own confession, Dr. John Sutton, *alias* Hall, *alias* Manning, is not a member of the Royal College of Surgeons, though he styles himself so. In September, 1855, he charged a Surgeon's assistant with an assault, at the Guildhall Police-court, when the following came out under Mr. Parry's cross-examination:—Mr. Parry: “Have you ever represented yourself as a member of the Royal College of Surgeons?” Sutton: “I have, Sir.” Mr. Parry: “And is that representation true or false, Sir?” Sutton: “It is false. I am not a M.R.C.S.” Mr. Parry: “Are you a Dr., or is that false also?” Sutton: “It is false.” Mr. Parry: “Have you ever gone by any other name?” Sutton: “No, Sir.” Mr. Parry: “Have you ever passed as ‘Dr. Rae’?” Sutton: “I may have gone by that name.” This person's antecedents do not admit of a probability that he has since acquired the title he then assumed. On Wednesday week this individual, anxious it seems by all or any means to gain notoriety, appeared at the Clerkenwell Police-court, and complained that the reporter in a late case had represented him (Sutton) as residing at 10, Goswell-street, whereas he lived at 15, Frederick-place. The reporter, however, stated, that “Dr.” Sutton, in giving his evidence, stated that he resided at that address; and on looking at the official police-sheet he found in the column signed by the prosecutor (Sutton), and in Mr. Sutton's own handwriting, the following, “John Sutton, 10, Goswell-street, St. Luke's, Surgeon.”

Mr. Kelly.—We have not seen the *Durham Chronicle*.

Mr. Laud.—Next week.

COMMUNICATIONS have been received from—

Dr. A. SIMPSON; Dr. W. MACLEOD; Dr. PARKES; Mr. HOLMES; Mr. RYMER; Mr. BARLOW; Mr. HUGHES; Mr. JONES, Jersey; Mr. PARKER; Mr. HEWITT; Mr. FOX; Mr. MOORE; Mr. MORETON; Dr. HARE; Dr. DEVENISH; Dr. LOTZKY; Mr. KING; A. A.; Dr. LAIRD; Mr. DEBENHAM; Mr. BRODHURST; Mr. DALBY; Mr. M'DERMOTT; Dr. MERRIMAN; Mr. W. HOWARD; Mr. A. MARSHALL; Mr. AMYOT; Mr. M'KECHNIE; Mr. DAY; Mr. G. WARING; Mr. J. W. WEIR; Dr. GUTTERIDGE; Mr. CALLAN; Mr. BREW; Dr. W. ARNOTT; Mr. PARSONS; Mr. BARROW; Dr. L. SMITH; Dr. S. LAIRD; Mr. FIELD; Dr. BROWN; Mr. J. RUSSELL; Dr. DE CHAUMONT; Mr. MAUND; Mr. KELLY; Mr. LAUD; Dr. MERRIMAN; Mr. CAVENDISH.

APPOINTMENTS FOR THE WEEK.

21. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; Westminster, 1 p.m.; King's, 2 p.m.; Charing Cross, 1 p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m.: Mr. P. C. Price, “On the Treatment of Certain Diseases of the Knee-joint by the Operation of Resection.”

ROYAL INSTITUTION, 3 p.m.: Professor Phillips, “On the Origin and Progress of Life on the Globe—Invertebrata.”

ROYAL BOTANIC SOCIETY, 3¼ p.m.

23. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.; Orthopaedic Hospital, 3 p.m.

24. Tuesday.

Operations at Guy's, 1 p.m.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m.: Professor Syme, of Edinburgh, “On Disarticulation of the entire Scapula, without removal of the Arm;” and, “On a New Method of operating for Impermeable Urethra.”

ROYAL INSTITUTION, 3 p.m., Prof. Huxley, “On the Sense of Sight.”
ZOOLOGICAL SOCIETY, 9 p.m.

25. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopaedic Hospital, 3 p.m.

HUNTERIAN SOCIETY, 8 p.m.: Mr. John Adams, “On a Case of Enlargement of the Blood-vessels of the Right Lower Extremity.”

GEOLOGICAL SOCIETY OF LONDON, 8 p.m.

26. Thursday.

Operations at St. George's, 1 p.m.; Middlesex, 12½ p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.

ROYAL SOCIETY, 8½ p.m.

ROYAL INSTITUTION, 3 p.m.: Professor Tyndall, “On Sound.”

27. Friday.

Operations at the Moorfields Ophthalmic, 10 a.m.; Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8½ p.m. Professor Faraday, “On the Conservation of Force.”

ORIGINAL LECTURES.

CLINICAL LECTURE

DELIVERED AT

University College Hospital,

By E. A. PARKES, M.D.

MACULATED TYPHUS—SUDDEN TERMINATION
ON THE TWELFTH DAY.EXAMINATION OF THE URINE DURING THE WHOLE COURSE OF
DISEASE—EFFECT OF COFFEE ON THE URINE.

On December 28, 1856, a young man, aged 17, was seized suddenly with headache, pains in the limbs, and shivering. He was seen by a Surgeon, and took purgatives, but no other medicine. Admitted into Hospital January 2.

Sixth day of disease.—Pyrexia great. Temperature of mouth, 103°; pulse quick; no local disease, except slight dry bronchitis. Skin covered with general mottled eruption; hue of skin, in addition to the eruption, darkish. Much headache and vertigo; some delirium; no abdominal symptoms; thirst.

7th and 8th days of disease.—Same symptoms.

9th.—Pyrexia great. Temperature, 103°. Eruption on skin lighter in colour. General hue of skin still dark from congestion. Head symptoms considerable. Action of skin, none; of intestines, slight. Tongue thickly coated; dry. Dry bronchitis almost gone.

10th. Pyrexia, same. Temperature, 102°; pulse, 104. Eruption disappearing fast. Headache less. Vertigo still great; thirst. No action of skin or of bowels. Tongue thickly coated; dry.

11th.—Pyrexia lessening. Temperature, 102° at 2 p.m., falling at night to 99.5°; head symptoms, much less. Eruption almost gone. Dark flush of skin much less. Pulse, 98. Tongue much cleaner. No action of skin or bowels.

12th.—Pyrexia gone. Temperature, 97.5°. Pulse, 98. Eruption not quite gone. No head, chest, or abdominal symptoms. One stool after 5j. of castor-oil, bilious and healthy-looking.

13th.—Pyrexia absent. Temperature, 97.5°. Pulse, 80. Tongue quite clean; eruption gone. Considerable muscular weakness and emaciation.

14th.—Well, except weakness. Temperature abnormally low—96°. Pulse, 72.

17th.—Temperature still low—96°.

21st.—Temperature normal—98°.

Discharged on the 27th day.

On the 19th day, when he was first weighed, the weight was 129 lbs. He was then gaining flesh; for on the 22nd day he weighed 131 lbs.

The diet, from the time of admission to the 12th day, was, in each twenty-four hours,—

Beef-tea, Oj.; milk, Oj.; port-wine, 3iij.; lemons, 2; bread, 3vi.

On the 12th day wine increased to 6 ounces, and fish ordered.

On the 16th day, chop, more bread, and, in fact, good diet. No medicine, except 5j. of castor-oil.

Diagnosis.—There was no doubt from the eruption, comparatively indistinct as it was, which was present on admission, that this was a case of exanthematic typhus. The characters of the eruption were:—it was very generally diffused over the whole body; it was made up of two parts, a diffuse mottling, and darker more defined spots; like many early typhus eruptions, it faded so much under the pressure of the finger as almost, but not quite, to disappear; it was permanent after it appeared, although its duration was not long, i.e. it was present on admission on the 6th day, and was gone entirely by the 13th; supposing it had appeared, as probably it did, on the 5th day, it had a total duration of eight days, being, however, very faint during the last three of these.

No other febrile disease could have given this eruption, and the diagnosis might have been fairly based upon it alone, but the correctness of the diagnosis was also proved by the progress of the disease. After a short and stormy course the disease terminated on the 12th or 13th day without anything like the crisis of *relapsing fever*; and, although the man was kept till

the 27th day, it did not afterwards relapse. During this course there was no indication whatever of any intestinal affection; the abdomen was flat, soft, painless; there was no diarrhoea, but on the contrary constipation, and castor-oil had to be given. *Typhoid fever* was, therefore, rendered most highly improbable by these negative symptoms, viz., the short course, the freedom from intestinal implication, and the absence of typhoid eruption.

Febricula is rarely attended by such severe pyrexial symptoms on the 9th and 10th days, and has never any eruption, except it may be the peculiar and uncommon "blue spots."

The fever, therefore, was decidedly not typhoid, or relapsing fever, or febricula, and it was decidedly not caused by any *local disease*, for this would have been detected, and it was not caused by any of the *Exanthemata*, which have their own eruptions. There can be no doubt, indeed, both from positive and negative symptoms, that it was typhus.

We will consider now a little more closely the changes going on in the system, as far as we can yet learn them.

During this disease the body was losing flesh rapidly; this was owing not only to diminished ingress of food, but also to increased egress of bodily structures in the form of excretory products. In other words, the metamorphosis of tissue, as judged of by the urine, was augmented.

This case appeared to be a very good one for the purpose of examining the urine. It was uncomplicated, except with very inconsiderable dry bronchitis during the first two or three days after admission; there was no diarrhoea, and no difficulty therefore in saving the urine; the skin was always dry, so that the cutaneous action produced no disturbing effect on the water of the urine. We could not, in fact, have had a more favourable case. Fortunately, also, my friend Dr. Ranke was able to examine the urine at the same time as myself; we have carefully compared our results, so as to be certain that no error has been committed.

Some isolated analyses have been made in typhus, but I am not aware that any case has been examined so completely as this one, though cases of typhoid fever have been examined by several observers.

When the patient was first admitted he was in a state not requiring medicine; the bowels had been acted upon by purgatives given before he entered Hospital.

He was put on the meagre diet already mentioned, and was allowed to drink as much water as he pleased.

The following was the analysis of the urine, as far as it was made, for two days during the height of the fever, when no medicine whatever was given:

In each Twenty-four Hours.

Day of Month.	Day of disease.	Temperature.	Action of skin.	Action of bowels	Quantity of urine—ozs.	Urea—grains.	Cl Na grs.	SO ₃ grains.
Jan. 4—5 ..	8th	103° F	Nil	Nil	26	522.67	Traces.	38.325
— 5—6 ..	9th	103° F	Nil	Nil	27	542.00	Traces.	39.673

From this table the following inferences can be made at once:—

1. In spite of the patient's thirst, and of a large quantity of fluid being drunk, several pints in fact, a small quantity of water left the system by the kidneys and skin, and none at all by the bowels. The constant hot dryness of the skin was present whenever the patient was seen, day or night, by the nurse, by my assistant, or by myself. This retention of water is a most remarkable fact in the history of pyrexia. It is not peculiar to typhus, but is common to, though not constant in, that large class of diseases characterized by increased temperature of the body. Its cause is quite unknown.

2. The amount of urea was greatly increased. The normal amount of urea excreted by active men on good diet, between 20 and 40 years of age, and weighing 145 lbs., is 31.82 grammes, or 491 grains, in twenty-four hours; each pound of the body excretes in that time 3.37 grains. Now, this boy, aged 17, weighing certainly not more than 129 lbs.—for ten days after, when he was recovering, he weighed that amount—excreted daily no less than 532 grains, or 34.5 grammes, viz.

at the rate of 4·12 grains for every pound weight, though he was on fever diet, and was taking scarcely any nitrogenous food into the body. After the fever had disappeared, from the 19th to the 27th day, with good diet and some exercise, the average excretion of urea was 415 grains; and this was probably nearly his normal excretion. As he weighed about 131 lbs. at this time, it would give 3·16 grains to each pound, or nearly the normal amount; and thus, during the pyrexial, as compared with the healthy period, each pound of the body excreted urea in the ratio of 4·12 to 3·16, or almost exactly one-quarter more, viz. as 100 is to 76½.

3. The chloride of sodium, instead of being, as in health, upwards of 180 grains per diem, was present only in traces; the amount was too small to be determined. Now, here was no pneumonia, no diarrhoea, as in typhoid fever, the stools of which contain chloride of sodium in some quantity; no sweating, as in rheumatism, which could carry off the chlorides. To what was the disappearance owing? Not altogether to the starving diet; for, if chloride of sodium be totally abstained from, it is a long time before it totally disappears from human urine; and, besides, the diet in this case did contain a considerable quantity of chloride of sodium.

This retention is not peculiar to pneumonia, but, as I have pointed out in the Gulstonian lectures for 1855, is common, like the retained water, to the pyrexial condition, though it is not constant, nor always seen to such an extent as in this case.

4. The sulphuric acid was supposed, like the urea, to be greatly increased. The normal excretion in adult males is 28·74 grains or 1·862 grammes in 24 hours; whereas this boy on a spare diet passed 39 grains, or 2·52 grammes on an average of the 2 days. Yet after the fever was over, the amount of sulphuric acid did not fall. On the 24th day it was 44 grains, so that perhaps it may have been normally great in this boy.

5. The amount of the other ingredients was undetermined. This, then, was the waste caused by the fever; although the diet was so poor and no exercise was taken, about 100 grains more of urea were daily excreted than in the state of health; *i.e.* metamorphosis was more active by one-fourth.

Having now fixed the amount of excretion produced by the fever, I determined to try, while the fever was still at its height, an experiment, and to give the patient a strong infusion of coffee. There was no necessity to give any other medicine; had there been, of course we could not have noted the effect of the coffee.

The reasons for trying the effect of coffee were these. It would seem, from the investigations of Böcker and of Julius Lehmann, that coffee has an extraordinary power of delaying the metamorphosis of tissue in health; under its use, the urea, the phosphoric acid, and the sulphuric acid alike diminish. It also produces another well-known effect; viz., it excites powerfully the nervous system.

Now here we seem to have the very qualities wanted in an anti-febrile medicine for typhus; viz., a nervous excitant, and an arrester of metamorphosis.

I have given coffee in 2 cases of typhoid fever; in one, with apparently the same result as in health; viz., diminution of urea; in the other, without this effect. The present case seemed well adapted for the trial.

Accordingly, during 2 days (10th and 11th), at the very height of the fever, the patient took during one day 7½ ounces, and during the other 6 ounces of an infusion of coffee. The two quantities of coffee each contained 60 grains of extract of coffee; *i.e.* when evaporated to dryness they each yielded 60 grains of pure extract, which dissolved again completely in warm water. 120 grains of extract were thus given in the two days.

The result was as follows:—
In each Twenty-four Hours.

Day of month.	Day of disease.	Temperature.	Action of skin.	Action of bowels.	Quantity of urine—ounces.	Solids—grains.	Urea—grains.	Cl Na—grains.	S—grains.
		102° F	Nil	One loose stool; no urine with it.	41	906	723	Traces.	44 813
	11	102° F	Nil	Nil.	36	706·8	516	Traces.	34·16

The effect of the coffee was therefore very different from the effect in health. There was a large increase in the water, and, as the patient did not drink more, this was remarkable; the urea was greatly increased, instead of being lessened; the average of the two days being no less than 619 grains; the sulphuric acid was not diminished, its average being 39·48 grains.

The coffee did not, then, in these doses lessen metamorphosis, yet the patient stated that he felt very much better; the headache disappeared, and the pulse became fuller and slower. Perhaps we ought, in so severe a pyrexia, to have given more coffee; this amount may not have been enough. The experiment is not conclusive against the use of coffee; it only shows that this amount did no good.

The coffee having been left off, we gave no more medicine, but continued to examine the urine. On the day after the coffee was left off, the pyrexia came suddenly to an end; the temperature fell to 97·5°. On the 15th day, it fell below the norm, viz. to 96°, and rose to the healthy amount of 98° on the 20th or 21st day of disease.

Continuation of Examination of Urine in each Twenty-four Hours.

Day of month.	Day of disease.	Temperature.	Action of skin.	Action of bowels.	Quantity of urine—ounces.	Solids—grains.	Urea—grains.	Uric acid—grains.	Cl Na—grains.	SO ₃ —grains.
9	12	97° 5	Nil	1 stool after 3i. of castor oil.	33	..	521	..	Traces.	38·52
10	13	97°·5	Nil.	1 stool.	31	715	519	..	Traces.	36·19
11*	14	..	Nil.	Nil.	27½	714·48	526	7·391	Traces.	39·40
12*	15	96°	Nil.	Nil.	27½	714	526	7·391	Traces.	39·40
13	16	..	Nil.	Nil.	21	..	516	..	Traces.	..
14	17	96°	Nil.	..	30	..	531	..	Traces.	..
15	18	..	Trifling.	Normal.	50½	..	507	..	Traces; but more.	38·50
16	19	..	..	..	46	..	418	..	Rather more.	..
17	20	..	..	..	24½	..	344	..	..	..
18	21	98°	..	..	32	..	336	..	..	..
19	22	..	..	..	39	..	401	..	..	..
20	23	..	..	..	40	..	459	..	172·31	..
21	24	..	..	..	56½	..	432	..	162·12	44·03
22	25	..	..	..	60	..	488	..	172·31	49·60
23	26	..	..	..	46	..	..	..	165·05	37·14
24	27	..	..	..	56	..	442	..	174·00	..

* On these days the urine of 48 hours was collected and analysed; it has been divided into two equal parts for the two periods of 24 hours.

On looking at this table it will be seen that the excretion of urea continued great till the 18th day of disease; it then fell very considerably for 4 days, and then, as perfect health returned rose again to some extent.

There is a singular uniformity in the excretion of urea, from the first day it was examined, viz., on the 8th day of the disease, to the 18th day. Taking away one day, when coffee was given, and when 723 grains were excreted, the average was 522 grains in each twenty-four hours of these ten days, and the extreme range on either side of this average was only 35 grains; *i.e.* the lowest amount was 507 grains, or 15 below the average, and the highest was 542 grains, or 20 above the average.

In spite, then, of the difference of temperature between the 8th and the 17th day; in spite of the changed diet, the metamorphosis of tissue proceeded with an extraordinary regularity up to the 18th day. There could not have been any disturbing causes, but each day, within a few grains, the same amount of urea was excreted.

Then on the 19th day, after the temperature had been below the normal for several days, the urea fell to what is probably its natural excretion in this man; in the following nine days (19—27 inclusive) it averaged 415 grains, or 107 grains less than in the former pyrexial period.

It was lower on the 19th, 20th, and 21st day, than afterwards, for the man was eating largely during the latter period; but its highest amount on any of these days was 488 grains, or 34 grains less than the average of the pyrexial period, and 235 grains less than the highest amount passed during the pyrexia.

Is it not very extraordinary that the high range of the urea was kept up after the temperature had fallen? This is certainly not what occurs in many pyrexial cases, for the excre-

tion of the urea and the sulphuric acid follows closely the changes of the morbid heat. I think we must wait for other cases to give us some clue to the fact that the metamorphosis of tissue, as expressed by the urea, was equal from the 12th to the 17th day, to that of the 8th to the 12th day, while the temperature was five degrees less during the former period. Why did not this increased metamorphosis keep up the febrile heat? Was there some rapid decomposition or disintegration from the 8th to the 12th day, giving rise to febrile heat, and then after this was there merely conversion into urea of substances half-oxydised, which during the febrile period had been taken up from the tissues and poured into the blood, and whose further change into urea was not attended by the evolution of heat? These are curious questions, which require more facts for their solution.

Another remarkable point in this case is the continued absence of the chlorides long after even the urea had commenced to fall in amount. The man was on good diet and taking plenty of chloride of sodium, the fever had ceased, and yet scarcely any chloride passed off by any channel. Where and why was it retained? Had the system been drained of it before in any way? The boy had not been well previously; he had had scarlatina three or four weeks before, but we have no reason to think the chlorides would be affected in this way by that disease. Almost suddenly on the 20th day the excretion of the chloride of sodium commenced, and averaged for the next four days, while he remained in the Hospital, 169 grains daily.

The water of the urine was increased after the period when the urea fell—contrary to what occurs in many cases it was inversely as the urea, thus:

	Average of water in 24 hours. Ozs.	Average of urea in 24 hours. Grs.
In the four days, during augmented temperature . . .	32.5	575
In the seven next days, with low temperature, with increased urea	31.4	521
In the healthy period, with normal temperature, nine days	44.4	415

I must briefly notice some other points about the urine.

The uric acid was, no doubt, in excess like the urea. There was a great deposit of urates. This would not, *per se*, prove anything; but they occurred in dilute urine, which was scarcely acid; and after a very great sediment had fallen, the urine was still so rich in uric acid that a drop of acetic or other acid threw down a most copious precipitate of amorphous uric acid. The amount was determined only once; on the 14th day, after the pyrexia had gone, it amounted to 7.391 grains in twenty-four hours, or almost the average of health.

The free acidity of this urine was very small till the 19th or 20th day. On the 9th day of disease the acidity of the whole twenty-four hours was only equal to 18 grains of crystallized oxalic acid, whereas the healthy acidity is equal, according to Winter, to 36.67 grains, and according to Vogel to from 31 to 62 grains of crystallized oxalic acid. Afterwards the urine was scarcely acid, was almost neutral in fact, till the 17th day, when it evidently became much more acid, though the exact acidity was not determined.

What makes this the more remarkable is, that in many febrile diseases the acidity is much increased.

Was it an exceptional thing in this case, or is this common in typhus?

Another point about this urine was that its colour was comparatively light. In fact, if you look at the relative amount of the total solids, as determined by evaporation, and at the urea, and then remember that there is potash to be added to the sulphuric acid, and phosphates and urates to be also taken into account, you will see that the amount of pigment and extractives could not have been great in this case. They must, indeed, have been lessened in amount.

I have noticed this before in some cases of true typhus, and it is a point of distinction between it and typhoid in some, though not in all cases.

Is, then, the disintegration of blood-corpuscles, which is now supposed to give rise to urine pigment (eventually, if not directly) lessened in typhus, instead of being augmented, as in rheumatism, pneumonia, and some other febrile diseases?

Albumen was never present in this case, though, in many cases of typhus, it appears at some period or other.

Such were the results given us by the analysis of the urine. They are very curious, and in part inexplicable. Still they are deserving of every attention; for we are likely to learn more about fever by a careful study of the excretions than by any other method of inquiry.

ORIGINAL COMMUNICATIONS.

ON

A GROOVED HOOK FOR TRACHEOTOMY.

By T. SPENCER WELLS, F.R.C.S.

Surgeon to the Samaritan Hospital, Lecturer on Surgery at the Grosvenor-place School, etc.

THE interest which has been excited lately by the publication of the papers of Messrs. Trousseau, Jones, and Henry Smith, in the *Medical Times and Gazette*, and Dr. Fuller's paper, at the Medical and Chirurgical Society, on Tracheotomy in Croup, induces me to bring before the Profession a simple instrument by which the performance of the operation may be very materially facilitated.

The instrument is represented in the annexed woodcut. It is simply a grooved hook or tenaculum, the groove running along the convexity. It was devised by M. Chassaignac, and described by him in his *Leçons sur la Trachéotomie*, published in 1855. It has not been made known, so far as I am aware, in this country, and as it supplies us with a simple, certain, safe, and rapid means of fixing the trachea, I think it worthy of attention from British Surgeons.

Nothing can be easier than the performance of tracheotomy in the dead subject, or on patients so far asphyxiated, or in such a state of syncope, that the trachea is motionless. But while respiration is going on the trachea ascends and descends with each expiration and inspiration—to a slight extent, it is true, when respiration is normal, but in a very different degree when it is obstructed. This mobility of the trachea may not cause any great difficulty in opening it if the patient be an adult, but those who have been called upon to perform tracheotomy on a young child with a short fat neck, know well how very desirable it is to be able to fix the trachea. Cases are on record in which Surgeons have been actually unable to open the canal. In other cases the important vessels on either side have been wounded. The knife, during some sudden motion of the patient, has traversed the trachea and wounded the œsophagus, the accident being followed by the escape of fluid and solid aliments into the trachea, or the knife has passed too close to the sternum and wounded the innominata. Still more commonly the trachea has not been opened in the centre, but to one side, so that the wound in the skin and the tracheal opening have not corresponded, and there has been difficulty in fixing the canula. Lastly, even supposing the incision to have been properly made in the trachea, there has been delay and difficulty in the introduction of the canula. Who has not seen, that as soon as the trachea is opened, and before the Surgeon has had time to separate the divided edges and introduce the canula, the patient cough and sob, and a little blood passing into the air passages, at once begin to cough spasmodically, bespatter the bystanders with bloody mucus, and appear to suffocate while the Surgeon is vainly endeavouring to fix the trachea, and possibly the patient may be dead before the canula is introduced? Such things have been.

All these difficulties and dangers may be avoided by the use of M. Chassaignac's grooved hook. In a case where there is no necessity for speed, the trachea may be laid bare by incision, but let us take one where no time must be lost. The cricoid cartilage is the point to be fixed. This is a certain guide, as it can be felt always however young or fat the



patient may be. It is the only complete ring in the tube, and therefore resists pressure while all the rest of the tube yields before the finger. The finger is pressed upwards from the sternum in the median line until the resisting cricoid cartilage is felt. It is immediately beneath the lower border that the hook is to be inserted. The nail of the left index finger marks the lower edge of the cartilage, and the hook held in the right hand is passed close to the nail directly into the trachea. The only difficulty in doing this is from the skin moving over the cartilage, but this may be avoided by a simple puncture. When the hook is in the trachea the handle is made to describe half a circle, and is brought up to the centre of the patient's chin, so that the cricoid cartilage being held firmly, the trachea may be drawn upwards and forwards well out of danger. A little air and bloody mucus escaping along the groove is a certain sign that the hook is in the trachea. This being the case of course nothing is more simple than to pass a knife along the groove and divide three or four of the tracheal rings. By holding the hook in the left hand and the knife in the right, the operator has the most perfect command of the trachea, not only for the incision, but for the dilatation of the wound and the introduction of the canula.

I am quite aware of the objections which may be made to the introduction of a new instrument; such as its being unnecessary, the operation having been very well done with a penknife and a quill, or a scalpel and a piece of bent wire—that the instrument would never be at hand when wanted—and so on; but while admitting that the surgeon should be prepared to act with the simplest tools in case of emergency, I think any one who has tried M. Chassaignac's hook once would be disposed to do so again, and nothing would be easier than to add a groove to the ordinary tenaculum of the pocket-case.

3, Upper Grosvenor-street, London.

ON THE USE OF A

SOLUTION OF CHLORIDE OF ZINC

IN THE UNHEALTHY CONDITION OF THE GUMS ACCOMPANYING
PROFUSE SALIVATION.

By THOMAS WILLIAM NUNN,

Lecturer on Pathological Anatomy at the Middlesex Hospital, etc. etc.

THE marked fœtor of the breath, associated with the inflammatory condition of the buccal mucous membrane generally, and of the more vascular papillary-fringed portion of it surrounding the necks of the teeth especially, as is almost invariably found during the specific action of mercury upon the system, is recognised under the name of "mercurial fœtor." It would not have been necessary to allude to this, were it not that the term "mercurial fœtor" most probably conveys an erroneous impression, leading to the conclusion that the peculiar action of mercury and the fœtor stand in the relation of cause and effect—that the fœtor is a result of the mercury, independent of the inflammatory action exerted by the presence of the mercury in the system.

Now a fœtor, not differing from the so-called "mercurial fœtor," except in degree, is perceptible, under ordinary circumstances, whenever the salivary and buccal membranes are involved in inflammation—in a common swelled face from a gum-boil, or in severe mumps, or, in what is rarer, suppurative inflammation of the parotid, or of the submaxillary gland the same fœtor is to be detected; the same again but more intense, "plus" the odour of gangrenous tissue in that terrible disease cancerum oris. It seems probable, therefore, that the fœtor in question is due to the rapid decomposition of the organic elements of the saliva, and of the buccal mucus, induced by the contact of these fluids with the inflamed surface; a decomposition analogous to that occurring in the urine when in contact with an inflamed bladder, or rather with its deteriorated secretion. A catalytic agent is provided by the inflamed membrane in either case. Under conditions of inflammation, the proportion of animal matters in the saliva, and in the buccal mucus being, doubtless, greater than normal; and while these organic elements are thus excessive in quantity, they are, perhaps, more than usually prone to decay. It would occupy much space, though not unprofitably, to discuss fully the changes that occur in the secretions of the mouth—secretions which contain a peculiar animal ferment (?)—ptyaline, and, therefore, may be supposed to

supply the conditions for complicated chemical changes. The object of this communication is rather to describe a method of instantaneously and safely removing the fœtor of the breath accompanying certain inflammatory states of the gums.

It consists simply in applying a strong solution of chloride of zinc, with a soft brush, to the gums, and to the spaces between the teeth: the brush should be made of *goat hair*; the solution, of a strength produced by mixing one drachm of Burnett's fluid (*i.e.* a concentrated solution of chloride of zinc) with seven drachms of distilled water.

During the process the mouth should be repeatedly washed with warm or cold water, the patient being prevented from swallowing a single drop. The solution should be applied by the hand of the Medical attendant only; as, although the remedy is a perfectly safe one, it is not one that it is advisable to commit to those ignorant of its properties. The frequency of the applications must be determined by circumstances. There need be no apprehension that the brush will cause the gums to bleed excessively, the solution at once acting as a styptic to the abraded vessels.

The solution, on contact with the rotting epithelial, exudation, and special salivary matters, immediately enters into combination with these, and an inodorous product results, which the brush removes, while at the same time it powerfully constricts the enlarged vessels of the papillæ of the gums and the rest of the alveolar mucous membrane, and thus tends to restore a healthy state of the local circulation.

No one, it is presumed, believes that the inflamed condition of the gums in any way assists the mercury in its desired effect on the system generally, therefore, an objection to relieving this inflamed condition is not anticipated, while there is good ground for suspecting that the inhalation of air loaded with the fœtid volatile products of the buccal cavity most materially tends to injure the patient.

The action of chloride of zinc on living animal substances deserves to be more fully studied. There seems to be a hesitation in employing it from the notion prevalent that the action of the solution of the chloride has the same corrosive power that the salt in its solid form possesses. The disorganizing properties of the solid chloride in a great measure depends on its attraction for water, of which it robs the tissues, to their destruction. The strongest solution can have no effect of this kind, it is evident; it has no solvent power similar to that of caustic potassa. One has heard of excisemen who, in their inspection of soap-works, have been so unfortunate as to stumble (?) into reservoirs of caustic alkali, and to have totally disappeared with the exception of their coat-buttons,—having been dissolved. An animal body would be, on the contrary, indefinitely preserved in a solution of chloride of zinc. The action of a saturated solution seems to be limited to the coagulation of the layer of albuminous materials with which it comes in contact, unless it be left on the part for a long time, in which case it would of course soak through and act on the stratum below in a similar manner.

OBSERVATIONS

ON THE

MEDICAL HISTORY OF THE EARLY KINGS OF ENGLAND.

By G. CHAPLIN CHILD, M.D.

(Continued from page 82.)

BEFORE passing from the history of William the Conqueror I may notice that the year of his death is recorded to have been most unhealthy. Holinshed writes: "About this time—1087—the people in all places were pitifully plagued with burning fever, which brought many to their end. A murren also came to the cattle. At the same time, which is more miraculous, tame fowls, as hens, geese and peacocks, forsaking their owners' houses, took to the woods and became wild." It seems that a long series of storms and disastrous weather had been followed by famine, a circumstance which at least partly accounts for the epidemic fevers, as well as for what appeared so marvellous in the eyes of the historian, for no doubt the fowls found themselves reduced to such short commons, that they were driven to the woods to shift for themselves.

The portrait of Gilbert, the king's physician, has been drawn by a contemporary in a style by no means flattering. Orderic thus writes:—"Gislebert, surnamed Maminot, the king's physician and chaplain, was chosen Bishop of Lisieux in 1077, filled the see 23 years, and managed ecclesiastical affairs with a strong hand. Although deeply skilled in the art of medicine, after he became bishop he was unable to cure himself. He was eminent for his learning and eloquence, abounded in wealth and the luxuries it procured, but was a slave to his own gratification and the care of the flesh. Ease and leisure were his great objects, and he indulged frequently in dice and other games of hazard. Negligent and slothful in his ecclesiastical duties, he was ready and active enough in hunting and hawking." As a set-off against these failings, Orderic admits that he was charitable, liberal, and of independent judgment. He instructed his clergy in "arithmetic, astronomy, physics, (in which medicine was then included,) and other profound sciences."

The first sentence of Wadd's curious book of "Mems and Maxims" is as follows:—"Anno 1070. The first hospital for sick persons, founded at Canterbury by Lanfranc, archbishop of that diocese." But it is very doubtful if it was a "hospital for the sick," in the present meaning of the term. Dugdale says that the hospital founded by Lanfranc was for "poor, infirm, lame, or blind men or women." Gervasius, who lived at that time, thus notices it:—Lanfranc "hospital fecit leprosum; in quibus ecclesiis clericos instituit, ut prædictis ægrotis, vivis et defunctis, spiritualia ministrarent." Up to this period hospitals for lepers were not numerous in England, but after the return of the first Crusaders from the East, leprosy increased to such an extent, and became so generally diffused over the country, that hospitals for lepers arose in almost every town of magnitude. Some hospitals were founded merely to serve as inns for the entertainment of pilgrims and travellers.

WILLIAM RUFUS, 1087—1100.

All we know of the medical history of this king is comprised in a few words. William of Malmesbury tells us that "the king was active and strong, with brawny chest," and that he had the family peculiarity, "a projecting belly." He was "of middle stature, exceeding the diminutive, but exceeded by the very tall." Although his name, Rufus, is generally thought to have been derived from his red hair, the same historian asserts that it was black.

Florence of Worcester relates that, in 1093, the king "was seized with a severe illness at the royal vil called Alveston, hastily removed to Gloucester, and lay there in a languishing condition during the whole of Lent." The nature of the malady, from which he speedily recovered, is not mentioned. When ill he made many vows, which when he got well he never kept. William passed a life of sensual indulgence, but his death, as every one knows, happened by accident, or at least by violence. Most of the old chroniclers record it pretty nearly in the same words. Roger of Wendover thus writes: "On the morrow of St. Peter ad Vincula, he went to hunt in the New Forest, when Walter Tyrrel shooting at a stag, unintentionally struck the king, who fell, pierced to the heart, without uttering a word; and thus, by a miserable death, ended his cruel life." To this Will. Malmesbury adds, that the king, "breaking off the shaft of the weapon, where it projected from his body, fell upon the wound, by which he accelerated his death."

The above is the substance of all I have been able to find respecting the medical history of this king.

HENRY I. 1100—1135.

Henry had been sent by the Conqueror to the Abbey-school of Abingdon, over which Farice, a Physician of Oxford, presided. He there became what Matthew Paris calls "juvenis sapientissimus," and he is known in history as Henry, the fine Scholar.

There is little recorded of him medically until we come to the end of his reign. Henry of Huntingdon informs us that two years before his death he was ill (infirmatus) at Windsor: the nature of the illness is not specified. He had been greatly harassed by family quarrels, and before the period of his death had "begun to be somewhat diseased, and could never perceive any cause thereof." Most of the old chroniclers, some of whom were living at the time, thus record his death. Being in Normandy, he went hunting in the forest of Lions, near Rouen. He returned home tired and hungry, and then

ate plentifully of lampreys. It seems the king was very partial to this kind of food, but as it was known to disagree with him, it had been interdicted, although in vain, by his Physicians. "Hæc igitur commestio pessimi humeris illatrix, et consimilium vehementer excitatrix, senile corpus lethaliter effecit. Contra quam natura retinens, fibrem excitavit acutam, ad impetum materici gravissimæ dissolvendum. Cum autem resistere vi nullâ potuisset, decessit Rex Magnus."—Matthew Paris.

On the third day Holinshed says the king despaired of his recovery, and sent for the Archbishop of Rouen, who administered religious consolation. On the seventh day he died. Matt. Westinister affirms that the king had been eating lampreys the day before he died. Some modern historians, as Lingard, omitting all mention of lampreys, merely say, that after hunting he was seized with an acute fever, of which he died; but most of the old chroniclers lay the chief stress on the lampreys. Holinshed denounces them as "verrie hurtful to health;" and, from the expressions of Gervasius and others, it appears that a belief in their poisonous nature was then very common. The flesh both of the lamprey and lamp-fern is considered rich, and must be eaten in moderation.

The cause of death seems to have been a fit of indigestion, followed by gastric fever.

Roger of Wendover and others relate that "the corpse of the dead king lay for a long time above ground at Rouen, where his entrails, brain, and eyes, are buried, the rest of the body cut and seasoned with salt, to destroy the offensive smell, which was great, and annoyed all who came near it. It was wrapped in a bull's skin, and the Physician, who was engaged for a large sum of money to open the head with a hatchet, and extract the brain after it was already too much corrupted, notwithstanding that the head was wrapped up in several napkins, was poisoned by the noisome smell, and the money which he received was fatal to him." The historian adds, "This was the last of King Henry's victims, for he had killed many before."

STEPHEN. 1135—1154.

Historians have left very few medical details relating to this king. Lingard writes that, in 1142, "a long and dangerous illness confined him to his chamber;" but I can find no particulars concerning it. Of his last illness, in 1154, Holinshed gives the best account, which is mainly taken from Gervasius. The king had been holding a conference at Dover with the Earl of Flanders, from which "the earl had no sooner returned back than Stephen fell sick, and was so grievously ormented with a pain in his bellie, and with an old complaint also, wherewith (as should appear) he had been often troubled, namely, the emrods (hemorrhoids), that finally he died in the Abbey." Gervasius uses a stronger expression, "fluxu violente corripitur." Henry of Huntingdon says that the illness came on suddenly during the conference. Bromton fixes the duration of the illness as "a few days." The place of his death even does not appear to be quite certain; it was, probably, either at Dover or Canterbury.

From details so meagre it is not easy to infer the cause of death with much certainty. Taking the data as we find them, we must attribute it to loss of blood from hæmorrhage, complicated, perhaps, with some kind of abdominal inflammation.

HENRY II. 1154—1189.

Henry II. is usually considered to have died "of grief." In 1189, Henry and Philip of France held a conference near Tours, respecting conditions of peace. It appears that Henry, rendered nervous by care and grief, was thrown into a state of great alarm by a thunderstorm which then occurred. He dropped his reins, reeled in his saddle, and would have fallen from his horse had he not been promptly assisted. The terms of peace were deeply humiliating to the English king, and no sooner had he returned from the interview than he was seized with severe illness—"corruptus febre." He became depressed in spirits, turned his head to the wall, and prepared to die. The fever speedily increased, and was attended with violent excitement; there was "raging fever." He cursed his sons, and the day on which he was born. Subsequently delirium came on, and he died on the 3rd, or more probably the 7th day after the conference.

Lingard says that "on the seventh day all hope vanished. He was carried into church, and at the foot of the altar received the consolations of religion." Holinshed, although

admitting that the king was "taken with a grievous sickness," nevertheless affirms that he died "more through anguish and grief of his late loss and troubles, than by the force of his bodily disease." Hume, apparently from oversight, says that Henry II. died of a "lingering fever." It appears to me that the most probable inference to be drawn from the above details is, that the king died of brain fever, or of cerebral inflammation.

A CASE OF INFANTILE EPILEPSY,

PART OF A SERIES ILLUSTRATING

AFFECTIONS OF THE NERVOUS SYSTEM, OF ORGANIC AND INORGANIC ORIGIN.

WITH CLINICAL AND PATHOLOGICAL OBSERVATIONS.

By J. W. OGLE, M.D.

Pathological Curator at St. George's Hospital, and Physician to the St. George's and St. James's Dispensary.

(Continued from page 589, Vol. XXXIV.)

Case 15.—A. B. was born naturally and easily, but did not cry for some time after birth, remaining livid in the face, with dark-coloured and swollen lips. A second ligature was required on the umbilicus, owing to its very turgid condition; and a third was subsequently applied owing to hæmorrhage. The body of the infant was in all respects natural, and showed that no defective nutrition during foetal life had existed. The mother not being able to suckle the child, it was fed with thin gruel for five days, the bowels requiring occasional doses of castor oil, and the motions containing much mucus and often deficient in bile. For three days it was then fed on thin sago, but great irritation of the bowels was evidently produced, and much restlessness. The other food was afterwards omitted, and ordinary milk and water (London milk) were substituted with good effect. On the ninth day after birth the eyes were noticed as wandering, the lips somewhat livid, and there was a tendency in the child to throw itself back, the head being inclined to one side. All those symptoms during a period of 24 hours kept coming on paroxysmally. On the tenth day the symptoms were rather increased in severity, and both hands were observed at times to be clenched, and carried to the throat, "as if to relieve some uneasy sensation there." On the eleventh day and up to the twenty-ninth day, the symptoms increased. On the twenty-ninth day the mouth was kept open; there was great fulness of the veins about the neck, slight suffusion of the face, and frequent attacks of rigid contractions of the muscles of the neck and trunk and upper and lower extremities, the head being for the most part inclined forcibly to the right side. On the thirtieth the attacks were more frequent and more active, and the spasmodic action was chiefly observed to occur in the following order:—1. The left arm and hand became affected. 2. The head was raised and then carried forward. 3. Both arms and hands became rigidly contracted, and the thumbs bent into the palms of the hands. 4. The trunk was bent forward forcibly, and there was forcible extension of the lower limbs. On this, the thirtieth day after birth, was observed for the first time a peculiar shrill noise in breathing, "as if the air passed through a fine tube," accompanying a retraction of the larynx, and this noise was presently succeeded by a gurgling and choking noise in the throat. After the noise the head was forcibly drawn to the right side, and the various muscles of the neck were seen to be very rigid, the face and neck becoming of a very red colour, then the veins of the face and temples became very large, the eyes staring and the eyelids spasmodically affected. Then the face became livid and swollen, the mouth drawn to the right side, and the muscles of the face violently contracted. Finally, a forcible expiration was made, the convulsive action gradually ceased, and the eyes were opened, the right one the first, and the other one slowly after it. At this stage the infant fell into a profound stupor, which often continued until another attack came on, or he suddenly awoke and took some food. The above is about the order in which the various elements of the attack occurred. On the thirty-first day after birth the father of the child, himself a physician in this town, consulted another physician in London, who ordered asses' milk, mixed with thin flour and water, and small doses of powdered rhubarb and mag-

nesia, and subsequently the dilute hydrocyanic acid. During the 24 hours the child had about 24 spasmodic attacks.

On the thirty-second day the attacks were the same, and half a grain of blue pill was ordered every three hours, in addition to the above medicine. On this day I saw the child for the first time, and found it sleeping, having had a spasmodic attack ten minutes previously. The skin of the face was somewhat red, and the veins at the side of the head full. There was also slight lividity of the skin about the eyelids, which were only half-closed, and occasional twitchings of the muscles of the mouth. At times the child half woke, when a divergent strabismus of the left eye was observable. The temperature of the surface generally was good. Presently the mouth was opened, and the tongue was observed to be working up and down within the mouth. I watched the child asleep for twenty minutes, at the end of which time I noticed an increasing redness of the skin of the face and head, and of the conjunctivæ; and the eyelids then opened, showing both eyes turned much to the left side. The veins of the integuments became greatly swelled, and the neck became violently twisted, the head being turned to the left side. There was no noise in the throat, nor any violent respiratory efforts, but there was most violent tension and contraction of the cervical muscles, the sterno-cleido mastoid, the platysma, etc. The hands became clenched forcibly, and the left one of a deep red colour. The face and neck then became of a bright red, indeed of the brightest vermilion colour, quite suddenly, and the evacuations were passed. There did not at that time appear to be any spasm of the muscles of the lower limbs. After the attack, which was the only one I saw, and which, therefore, I had not time to analyse minutely, but of which I only give a general idea, there was noticeable divergent strabismus of the left eye, and great dilatation of both pupils. Previous to my visit the child had taken food largely, but rejected it. The medicines were omitted altogether. On the following day, the thirty-third of its life, the child was said to have had severe fits in the night, in one of which it was "almost black." During this day the attacks were more seldom, the last being at 11 a.m.

On the thirty-fourth day no more fits had occurred since eleven o'clock the day previously, and food had been taken better, but immediately rejected. The evacuations were very green; and the bicarbonate of potash and castor-oil were given.

No more fits occurred until his death, on the forty-third day, but up to that time he had constant inclination of the head backwards and to one side, and the veins at the back of the head were very congested. There was also occasional difficulty in swallowing.

Post-mortem Examination showed nothing which could be interpreted as essentially a cause of the attacks. The brain was very soft, but not more so than is ordinarily met with at the age of the patient; and much blood existed in various veins within the cranium, which was obviously merely the result of the extreme congestion following the spasm about the larynx and neck, and, possibly, the thorax.

Remarks.—Most of the particulars of the above case of infantile epilepsy were given to me by the father of the infant, the words quoted above, and the detailed description of the convulsions being his own. I only had the opportunity of visiting the child once during life, as I have above hinted. The case exhibits many details of pathological interest. As chief subjects of importance we have, *firstly*, the general congestion in connexion with the protracted respiration after the birth of the child, whatever it was that interfered with the breathing; *secondly*, the hæmorrhage from the divided umbilical cord requiring a third ligature; and, *thirdly*, the severe and lengthened convulsive attacks, the latter involving many points of special interest. Nothing, apparently, took place during foetal life, or existed in the family history of the patient, which could in any way determine the attack. Possibly the cause lay in some special excitability, originated in part by the congestion after birth, and in part by the hæmorrhage causing debility; but, whatever the general predisposing cause, the efficient cause was, no doubt, the local disturbance and irritation of the stomach and intestines, caused by the child's feeding on improper food. Had a wet-nurse been had recourse to, there seems reason to suppose that all would have been rectified. As regards the separate convulsive attacks themselves, they are of the highest interest—1st, as showing extreme variety of the fit; for instance, we have the spasm at one time

general, at another time confined, more or less, to one side of the body, the face and mouth being drawn to one side; while, at another, certain sets of muscles were affected, reminding one strikingly of the *emproso-* and *opis-thotonos* and other forms of spasm in tetanus. 2ndly, as showing laryngismus and retraction of the larynx, as also trachelismus, distension of the veins of the neck and face, and swelling of these parts, with every shade of redness and purpurescence of the integuments up to complete lividity. The history of the succession of the various individual spasmodic acts forming each complete convulsive attack is of importance as exhibiting the exalted part, which, in many cases, laryngismus may play in such attacks. For example, we have described, first, spasm of the muscles of the arms and hands, then of such as raise the head, then of the muscles of the trunk, the fore and back parts, and of the lower limbs. After that we have pointed out a peculiar "shrill, pipe-like" noise during the act of inspiration, along with a "choking sensation." This was followed by rigidity of the strong muscles of the neck; and then we have the discoloration of the integument, amounting, in some cases, to "blackness," obviously, I think, the result of pulmonary congestion attendant on the spasm at the respiratory inlet, the glottis. All these symptoms remained until there came a forcible expiration, at which time they became, as it were, dissolved and yielded, a general unlocking, as it were, taking place, followed by stupor, such as not uncommonly occurs after epileptic attacks. During the only attack which I chanced to witness, the face presented the most vivid and bright vermilion hue possible—a colour such as I should not have imagined could have been produced by venous congestion, and reminding me rather of that produced by the injection of the fœtus with bright vermilion and size, the lips and eyelids becoming swelled and protruded, as is oftentimes seen in such injections. This attack was not of the most severe kind, and was only attended by trachelismus; there was no laryngismus. I am warranted, I think, as well by the nature of the disease in the above case, as by the example of Sydenham, in the application of the term "Infantile Epilepsy." See page 65 of the *Anecdota Sydenhamiana*, edited by my friend, Dr. Greenhill; also chapter xl. of the *Processus Integri*.

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[To be continued.]

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. MARK'S AND OTHER HOSPITALS.

CLINICAL COMMENTARIES ON DISEASES OF THE RECTUM AND ANUS.

St. Mark's Hospital, (for piles, fistulæ, and other diseases of the rectum,) is one of which no notice has yet been taken in our Reports. After encountering much and long-continued Professional opposition, on the ground of its being a needless specialty, and likely to injure the larger Institutions, its founder, Mr. Salmon, has succeeded in bringing it to a position which can no longer be ignored. It is now among the permanent Medical charities of the Metropolis, well supported, and having a very large attendance of patients. As a Hospital, it is a model in the excellence of its internal arrangements. The beds are twenty-five, and constantly full. Although as yet no clinical lectures are given, and there is, indeed, no attendance of students, yet its practice is freely thrown open to members of the Profession, and we understand that further arrangements, with a view to making it useful as a school, are in prospect. In common, we believe, with other representatives of the Medical press, having received an invitation, about a year ago, to attend its practice and report thereon, we commence this week the first of a series of annotations respecting the diseases comprized in its province. With a view to their greater utility we shall, in carrying out this plan, not by any means confine our notes to St. Mark's, but shall include also the practice of those Surgeons to General Hospitals who have devoted especial attention to these diseases (Mr. Quain, Mr. Curling, Mr. Cock, Mr. Coulson, etc.), and when it may seem necessary, also make reference to the works of Copeland, Ashton, and Syme, and the published

lectures of Sir Benjamin Brodie. The attempt in our "Commentaries" will, therefore, be to convey to our readers accurate representations of the modern modes of treatment as practised by those of largest experience, illustrating them further as occasion may require by allusions to the opinions of older authors. It is but a short half-century since diseases of the rectum were almost wholly in the hands of Quacks, the information respecting them possessed by well-educated members of the Profession was meagre in the extreme, and within a much more recent period than that some of the best of the improvements in treatment have been introduced. Considering their frequency, their severity, the misery, mental and physical, which they often cause, and the ease and simplicity of the measures by which some of their worst forms may be remedied, it is yet much to be desired that the knowledge possessed by the Profession generally were in further detail, and as conducive to this end we trust that our "Commentaries" may be useful and acceptable to our readers.

NO. I.—PROLAPSUS ANI IN CHILDREN.

The measure of treatment which Mr. Salmon insists on most strongly in this class of cases is that the patients shall be compelled to pass their evacuations laid on the back. In this position it is impossible to strain violently, and the bowel very rarely descends. After a time the relaxation of parts which permits the descent is recovered from, and the liability is at an end. At the same time he employs freely lotions consisting of vegetable astringents, as the oak bark, rhatany, etc. Excepting alum, he disapproves of the employment of local astringents of the mineral class. Mr. Quain never employs injections, but thinks well of astringent lotions to the part when actually protruded. At page 521 of this Journal for November 18, 1854, the reader will find a report of some trials of the local application of strychnia by Mr. Athol Johnson at the Hospital for Sick Children. The remedy was, of course, only tried in very severe cases, and Mr. Johnson's conclusions were against any further use of it, on account of its inconveniences. In the same paper the employment of actual cautery in obstinate cases is spoken favourably of. At page 136 of the Journal for February 10, 1855, will be found a notice of a practice which is in high favour with Mr. Lloyd at St. Bartholomew's, of smearing the protruded gut freely with solid nitrate of silver. At the Metropolitan Free, Mr. Hutchinson always employs *nux vomica* internally in these cases, considering that the prolapse is evidence of deficient muscular tonicity both in the sphincter and the coats of the bowel itself, and of the need of a nervine tonic. He finds it quite safe, even for out-patients, to prescribe the tincture of *nux vomica*, in doses of about a minim to a child of a year old, and half a minim additional for every added year of age. Three times this quantity would scarcely cause unpleasant symptoms, so that a good margin is left for carelessness in administration. Mr. Ashton (page 196) has a good remark on the necessity of attending to the liver in these cases, and on the benefits often derived from alterative aperients. Sir B. Brodie's injection of the sesquichloride of iron (3j. ad Oj.) is well known, as also his advice to "purge the child with calomel and rhubarb." Mr. Curling recommends the cod-liver oil as useful both as a mild relaxant and in restoring the general health at the same time.

We scarcely need insist on the importance of early efficient treatment in these cases. It is in the early stages that they are easily curable. If in all cases of falling of the rectum in children a plan of the following kind were promptly adopted: 1. *Motions to be passed in the recumbent posture.* 2. *The prolapsed gut to be washed with oak bark and alum.* 3. *A dose of rhubarb and calomel to be given.* 4. *A course of tonics (quinine or nux vomica) with plain, nutritious diet*—there is little doubt but that cases of the intractable class would never be met with. It is when by long neglect or inefficient measures in the early stages the cellular tissue connecting the mucous and muscular coats has become permanently loose and elongated, the mucous membrane itself corrugated and œdematous, the sphincter and levator ani relaxed, that difficulty in treatment results; and in some of these cases (often of many years' standing) the best-selected measures may fail, and operative interference become the only resource.

NO. II.—CHLOROFORM IN OPERATIONS ON THE RECTUM.

In Hospital practice Mr. Salmon never uses chloroform, and he states that with private patients he employs it only

when it is very strongly desired. He believes that by relaxing the sphincter and the anæsthetic much increases the tendency to bleed, hæmorrhage being, under ordinary circumstances, to a very great extent controlled by a firmly contracted sphincter. This observation applies equally to the operations for fissure, prolapsus, or hæmorrhoids. Those who have been in the St. Mark's operating theatre cannot have failed to feel surprise at the extreme quietness with which the patients almost invariably submit to these painful operations. The absence of the chloroform is, indeed, scarcely noticed. Mr. Salmon attributes this result to the organization of the Hospital, by which patients who are recovering become the attendants on those more recently admitted, and are instructed to inspire them with confidence, and at the same time to impress upon them the absolute necessity, for their own good, that they should behave well, and assist the operator. We believe Mr. Salmon is not alone in his dislike to chloroform in operations on the rectum, though we are not aware of any other Surgeon who lays any great stress on its disuse.

NO. III.—CALOMEL OINTMENT FOR ANAL FISSURES, ETC.

The ointment which is in constant use at St. Mark's for small fissures about the anus, irritation, etc., consists of five grains of calomel to one drachm of lard, or still better, of elder-flower ointment. It is directed to be smeared gently (not rubbed) over the orifice, after washing the part with warm water. No dressing whatever is permitted to be worn. Ointments containing one or other mercurial preparation as their active constituent, have been favourites with most specialists in this department. The black oxide, so warmly commended by Copeland, enjoys, perhaps, the widest reputation. There is possibly not very much to choose between them, and with either most excellent results may often be obtained. Mr. Salmon has, however, a very strong preference for the calomel, and the conclusions of his experience are well worthy of being trusted.

HOSPITAL NOTES.

WHY IS THE BLOOD FLOWING FROM THE DISTAL END OF A WOUNDED ARTERY SOMETIMES OF A VENOUS HUE?—In the case of punctured wound of the femoral artery operated upon by Mr. Cock, in Guy's, (a) about two months ago, a phenomenon occurred of much interest, to which, in our previous report of it, we did not specially advert. After the upper ligature had been tightened, and when pressure was removed, the blood which still flowed from the wound in the vessel was of a *dark venous hue*. Mr. Cock remarked upon this circumstance, and stated that he had observed it in five or six other instances; further adding that he had noticed sometimes after flowing for a time that the blood would again become of arterial hue. Mr. Guthrie, in his work on "Diseases of Arteries," page 137, remarks upon this phenomenon thus: "That the reflux blood from the lower end of a great artery after its division will be of the same colour as venous blood, is a surgical fact which cannot be too strongly impressed upon the minds of students." At page 291 of this Journal, for March 25, 1854, we mentioned, in recording two cases in which reflux blood was not of venous hue, some reasons for feeling sceptical as to Mr. Guthrie's case, and for suspecting that in such exceptional cases the vein might have been wounded through the artery. Since it was impossible that blood should acquire a venous hue in merely passing through collateral channels, the assertion, that it did acquire that tint under the circumstances alluded to, seemed to involve the supposition of reversed capillary circulation, and the denial of the existence of a *vis a fronte*. On re-reading Mr. Guthrie's case, there does not still seem to be much improbability in the supposition that the vein had been wounded; but as to the correctness of the law he laid down, supported as it is by Mr. Cock's experience and that of other observers, there can no longer be reasonable doubt. And now as to its explanation. In Mayo's "Physiology," fourth edition, page 21, is the following:—"When arterial blood is kept at rest in a living vessel, it gradually acquires the properties of venous blood, as may be seen on slackening a tourniquet after an amputation, when the first blood that issues from the

divided arteries is of a dark colour." Now, taking this statement (with which until recently the writer was not acquainted) together with Mr. Cock's observation, that the reflux blood of a wounded artery does not continue to flow of venous colour, but that only the first gushes are so, we seem to have a satisfactory interpretation of the circumstance. The blood stagnated in the arteries (collateral branches, as well as the distal trunk itself) during the operation is that which first escapes; and after it has flowed away, and when the collateral current has got freely established, then, as might be expected *à priori*, there is no reflux from the venous capillaries, but the blood is of arterial hue. We cannot avoid adverting to the accurate manner in which this explanation (not, we believe, previously pointed out) fits with the sagacious and accurate observations of Mr. Cock as to fact.

—EXPECTED OPERATIONS.—At St. Mark's this day (Saturday) Mr. Salmon has several operations on the rectum, at 10 a.m. At St. Bartholomew's, on the same day, Mr. Stanley has an amputation case; and Mr. Skey one (of much interest) in which a tumour is to be removed from the neck. At St. Thomas's, Mr. Solly has an operation for necrosis. At King's College, Mr. Fergusson has a perineal section, an operation for hare-lip, and the removal of a breast. At St. George's, on Thursday, Mr. Prescott Hewett will remove a large tumour from the groin.

THE PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

STATISTICAL REPORT OF THE PRINCIPAL OPERATIONS PERFORMED DURING THE LAST SIX MONTHS OF 1856.

THE subjoined Report comprises the following Hospitals:—Addenbrooke's (Cambridge), the Birmingham (Queen's), the Berks Royal (Reading), the Cheltenham General, the Cumberland (Carlisle), the Derby General, the Dorset County (Dorchester), the Dundee Royal Infirmary, the Durham County, the Gloucester, the Hitchin General, the Hull, the Leeds, the Leicester General, the Liverpool Royal, the Liverpool Southern and Toxteth, the Margate Sea-bathing Infirmary, the Nottingham General, the Sheffield General, the North Staffordshire (Etruria), the South Staffordshire (Wolverhampton), the Staffordshire General (Stafford), the Sussex County (Brighton), the West Norfolk and Lynn (Lynn), and the York County Hospital.

LITHOTOMY.

Number of cases, 32. Recovered, 24. Under treatment, 3. Died, 5.

Case 1.—The Liverpool Royal: Mr. E. Bickersteth.—A lad, aged 11, who for seven years had suffered severely from symptoms of stone. The usual operation was performed, and an oval calculus an inch and a half long removed: an artery (the transverse) required ligature. Recovered. Case 2.—The Nottingham: Mr. Eddison.—A boy, aged 7; symptoms of stone for two years. Stone lithic acid, and weighing three drachms. Recovery. Case 3.—The Leeds: Mr. Smith.—A healthy boy, aged 4; symptoms of stone for two years; two small lithic acid calculi were removed. Recovery. Case 4.—The Leeds: Mr. Teale.—A healthy boy, aged 7; symptoms of stone for four years; a lithic acid calculus weighing two ounces was removed. Recovery. Case 5.—The Queen's Hospital, Birmingham: Mr. Sands Cox.—A boy, aged 4, who had suffered from stone for two years. A small lithic acid calculus was removed. Recovered. Case 6.—The Bradford: Mr. Parkinson.—A healthy boy, aged 12; symptoms from infancy. A lithic acid stone weighing five drachms was removed. Recovery. Case 7.—The Bradford: Mr. Meade.—A healthy boy, aged 2½; symptoms of six months' duration. The stone weighed a drachm and a half, and consisted of lithate of ammonia. Recovery. Case 8.—The North Staffordshire: Mr. Ball.—A healthy boy, aged 6; symptoms of two years' duration. Stone the size of a broad bean, and of lithic acid. Recovery. Case 9.—The Sussex County: Mr. Turner.—A boy, aged 15; symptoms from infancy. The calculus weighed an ounce and a half. Recovery. Case 10.—The Sussex County.—A boy, aged 3; symptoms of six months' duration. Calculus the size of a bean. Some hæmo-

(a) See Medical Times and Gazette for Jan. 24th ult., page 87.

rrhage occurred on the fourth day, but it was easily arrested. Recovery. *Case 11.*—The Hull: Mr. Huntingdon.—A boy, aged 5; symptoms of nearly three years' duration. The calculus consisted of oxalates, and weighed five drachms. Recovered. *Case 12.*—The Royal Berks: Mr. Moxhay.—A boy, aged 21 months; symptoms of nine months' duration. The stone was of oval shape, and weighed a drachm. Recovered. *Case 13.*—The Staffordshire General: Mr. Hughes.—An intemperate, cachectic man, aged 21. He had suffered from symptoms of stone for two years, but only applied for relief in consequence of an attack of retention. The bilateral operation was performed; the stone was of oxalate of lime, and weighed a drachm and a half. Profuse hæmorrhage attended the operation, and was only arrested by continued pressure after much blood had been lost. Subsequently symptoms threatening peritonitis occurred, and he only recovered after a tedious convalescence. *Case 14.*—The Derby: Mr. Gisborne.—A healthy boy, aged 14; symptoms about a year. A mulberry-stone, weighing five drachms, was removed. Recovery. *Case 15.*—The Derby; Mr. Fearn.—A labourer, aged 40, the subject of partial paraplegia. He had been operated on for stone a year ago, and the present symptoms had existed several months. Two soft lithates calculi were removed. Hæmorrhage was arrested by plugging and pressure. Recovery. A perineal sinus remained at date of report. *Case 16.*—The South Staffordshire: Mr. Sandford.—A healthy boy, aged 10; symptoms of two years' duration. Four small lithic acid calculi were removed. Recovered. *Case 17.*—The Cheltenham: Mr. Wright.—A stout, healthy-looking navigator, who had suffered from symptoms of stone for sixteen years. Having been told when a boy that he had stone, and would require an operation, he had never since consulted a surgeon, but when in pain had procured anodyne medicines from druggists. He was at length compelled to seek admission into the Hospital, in extreme suffering from retention of urine. On sounding, a stone was at once detected. On December 16, the usual operation was performed, and two large calculi removed. The stones consisted of the carbonates and phosphates of lime and magnesia, and together weighed nearly eight ounces and a half. The largest was two inches and a quarter in diameter. Doing well. *Case 18.*—The Bradford: Mr. Parkinson.—A boy, aged 6. Strumous and delicate symptoms, of long standing, and severe. A mulberry calculus, weighing more than half an ounce, was removed. Recovered. *Case 19.*—The North Staffordshire: Mr. Garner.—A healthy man, aged 61; symptoms of five years' duration. Three lithic acid calculi were removed; the largest measured five inches by three. The recovery was much retarded, and, at one period, rendered very doubtful, by phagedæna affecting the wound. Since the operation the urine for some time deposited the phosphates, but it is now in good state, and the once large wound is all but healed. *Case 20.*—The Gloucester: Mr. Wood.—A boy, aged 5; symptoms of two years' duration. A small calculus was removed. Recovered. *Case 21.*—The Leicester: Mr. Benfield.—A healthy lad, aged 5; symptoms of one year's duration. A small stone was removed. Recovered. *Case 22.*—Addenbrooke's (Cambridge): Mr. Humphrey.—A healthy lad, aged 7; symptoms of uncertain duration. An oval lithic acid stone was removed, weighing nearly a drachm and a half. Recovered. *Case 23.*—The North Staffordshire: Mr. Garner.—A man, aged 21, in good health; symptoms dating from childhood. A mulberry stone, weighing an ounce and a half, was extracted. Recovered. *Case 24.*—The York: Mr. Hey.—A boy, aged 6, in bad health, who had suffered for long from symptoms of stone, and had been repeatedly sounded by other Surgeons. The usual operation was performed, and the stone removed. Recovered. *Case 25.*—The York: Mr. Hey.—A boy, aged 10, in poor health; symptoms of a year's duration. Recovered. *Case 26.*—The York: Mr. Hey.—A farm labourer, in fair health, aged 55. The stone was of medium size. Some hæmorrhage followed the operation, and gallic acid in powder was applied on plugs of lint for its arrest. Recovered. *Case 27.*—The West Norfolk and Lynn: Mr. Rendall.—A fairly healthy man, aged 65, for four years the subject of calculus. Four roundish stones, weighing together more than an ounce, were removed. No bad symptoms followed the operation, but subsequently he sank into a feeble state, and at the time of the report (7 weeks after) he seemed in an almost hopeless condition. The wound had healed to a considerable extent.

Case 28.—A stout florid man, aged 37. A stone of medium size, weighing nearly seven drachms, was removed by the usual operation without any inconvenience. Death followed thirty-five hours afterwards. At the autopsy extensive extravasation of urine was found. The coats of the bladder were thickened and inflamed. The peritoneum was much congested, and showed patches of adherent lymph. *Case 29.*—A stout large man, aged 31, of intemperate habits and very irritable temperament; symptoms of stone for four years. The usual operation was performed. Peritonitis set in on the second day, and death occurred on the fifth. *Case 30.*—A man, aged 44, worn down by suffering; symptoms of stone of several years' duration. A large stone, weighing nearly four ounces, was extracted. Hæmorrhage followed the operation, and required plugging for its restraint. Death from exhaustion on the fifth day. No autopsy. *Case 31.*—A man, aged 68; symptoms of ten months' duration. The stone broke in extraction. Death from phlebitis on the tenth day. *Case 32.*—A boy, aged 3; duration of symptoms uncertain. The stone was very friable, and broke repeatedly in the forceps. It consisted of the ammoniac-magnesian phosphates. Death.

LITHOTRITY.

Case 1.—The Queen's Hospital: Mr. Sands Cox.—A miner, of dissipated habits, received an injury from a fall of earth, eight months before admission, since which he had experienced pain and difficulty on micturition. The urine was loaded with pus and phosphates. He was phthisical, and much out of health. Lithotomy being deemed inadvisable, on April 28 Mr. Cox crushed the stone. A small portion of calculus escaped in the evening. On June 28 and July 2 the operation was repeated by the House-Surgeon (Mr. West); and, for a fourth time, on August 11. After the third sitting a febrile attack necessitated a period of rest. The fragments collected weighed together about a drachm. The urine is now clear, and the man free from all symptoms.

Case 2.—The Hull: Mr. Craven.—A healthy man, aged 55. The first crushing was performed on September 3, and between then and December 1 it was repeated eight times. Fragments of calculus weighing, when dry, more than 2 drachms, were collected; and, on the last soundings, December 10 and 13, no stone could be detected. The man has been discharged, but is to return to be again examined in a month or two.

Case 3.—The West Norfolk and Lynn: Mr. Sayle.—A healthy labourer, aged 60; symptoms of a year's duration. The calculus was small (three quarters of an inch in diameter) and the bladder healthy. The lithotrite was used twice, with a ten days' interval. Portions of calculus weighing about 4 scruples were removed, and no bad symptoms whatever had resulted. At the last two soundings no stone could be detected.

NOTES AND QUERIES.

He that questioneth much shall learn much.—Bacon.

No. 192.—ODOUR OF PLANTS.

I shall feel obliged if any of your readers can inform me where I can find anything concerning the odour of plants; if there are any special organs demonstrated which produce odours, in what part of the plant these organs are found, and the different natures of the substances producing these odours, the plants in which they are best shown, and the authorities or reasons for any assertions given. I am, &c.

February 10, 1857.

CÆSARIENSIS.

No. 193.—GREY HAIR.—ACTION OF MERCURY ON STEEL.

Will you be kind enough to put the following queries in "Notes and Queries":—

1. Are there any undoubted cases of the hair turning grey in twenty-four hours? If so, the process by which the phenomenon is accomplished?

2. Is it a fact that mercurial ointment preserves iron and steel from rusting? If so, why?

If any of your correspondents can answer these I shall feel obliged. I am, &c. F. R.

No. 194.—DR. WILLOUGHBY.

Since I wrote a few lines to you, some days ago, on the subject of Dr. Willoughby's MS., lately brought to light by

Mr. Wilde, that gentleman has kindly sent me a copy of his "Account of a Manuscript of Dr. Willoughby's, written in 1690, 'On the Climate and Diseases of Ireland,' " extracted from the Proceedings of the Royal Irish Academy, vol. vi. The following remarks, which will not take up very much of your valuable space, may possibly be interesting to Mr. Wilde, and to a few of your other readers:—

There is in the Bodleian Library at Oxford a MS. (Rawl. c. 406), which professes to contain "Extracts of Sydenham[s] Physick Books, and some good Letters on various Subjects." The former part of the MS. was written apparently about the end of the seventeenth century, and was published for the first time in 1845, under the title, "Anecdota Sydenhamiana: Medical Notes and Observations of Thomas Sydenham, M.D., hitherto unpublished." "The name of the writer is not mentioned, nor is anything known of the history of the MS., except that it once belonged to Dr. Richard Rawlinson, and forms part of the collection of MSS. bequeathed by him to the University of Oxford about the middle of the last century." (Preface to the "Anecd. Sydenh.")

The second part of the MS. is in a different handwriting, and was copied into the volume at least as late as the year 1702 (see *Provincial Medical and Surgical Journal*, 1846, page 43). Thence it was transcribed in 1845, and published in the *Provincial Medical and Surgical Journal*, for that and the following year. It consists partly of some letters by Dr. Goodall, relating to the early history of the Peruvian bark, and other matters; and partly of some extracts from Dr. Willoughby's papers, which are almost word for word the same with those recently published by Mr. Wilde from a MS. at Dublin.

When I saw it mentioned in your Journal that the Dublin MS. was written in 1690, I hastily conjectured that it might possibly be the original from which the Oxford MS. (which was not written till the beginning of the 18th century,) had been copied. I now see that there is no ground for this supposition, (which may nevertheless *accidentally* be correct,) inasmuch as the date in the Dublin MS. is almost certainly erroneous; besides, as the "Observations," etc., are said to be "by Dr. Willoughby, an eminent Physician," the MS. could hardly have been written by the author himself.

The date assigned to these "Observations" in the Dublin MS. is 1690, nor is there any internal evidence in Mr. Wilde's brochure to prove that this date is incorrect; for, though the author speaks of the mortality of "seven years," we are not told which "seven years" he means. In the Oxford MS. it is different. The date there mentioned is "April 17, 1691," which agrees exactly with the statistical table given below, (*Provincial Medical and Surgical Journal*, 1846, p. 140.) from which it appears that the "seven years" alluded to by Dr. Willoughby were 1682-90.

Perhaps Mr. Wilde would kindly give your readers some further information respecting the Dublin MS., and state whether it contains anything besides these interesting "Observations" by Dr. Willoughby. I am, &c. M.D.

ANSWERS.

No. 185.—EMBALMING BY THE "GANNAL PROCESS."

Your querist, E. W., will find all the information he requires respecting the different processes for embalming in the "Manuel du Naturaliste préparateur, par M. Boitard," published by "Roret, Rue Hautefeuille, No. 10, Paris," 1839. At pp. 333 and 334 the author says:—

"M. Gannal s'est occupé de chercher une substance qui, produisant les effets mentionnés dans ce rapport, fût à plus bas prix, et il l'a trouvée dans le sulfate simple d'alumine."

"Un kilogramme de ce sel dissous dans deux litres d'eau, suffit en hiver pour conserver un cadavre frais pendant trois mois."

"Les premières injections furent faites par l'aorte; plus tard, pour éviter le déchirement des parties pectorales, on les fit par l'artère carotide, ce qui réussit toujours très bien quand on pousse le liquide du haut en bas."

The chloride and acetate of aluminum are also used. The former preserves the colour of the muscles. A solution of alum and nitrate of potassa, of a specific gravity of 10 degrees Baumé, will preserve a subject at a temperature under 10 degrees centigrade.

The experiments with these salts refer chiefly to questions of temperature, a certain ratio being observed between the specific gravity of the injections and the temperature the

body is to be exposed to:—"Leur propriété antiseptique est fondée sur leur action chimique, que modifie les substances animales, soit en leur enlevant l'eau de composition, qui en détermine la putréfaction, soit en s'opposant à son action immédiate."

There are many processes used in the first stage of embalming:—Godby's Solution, consisting of alum, chloride of soda, and bichloride of mercury:—the plan, first proposed by Dr. C. J. B. Williams, of using dilute acids, by which animal textures are metamorphosed into adipocere:—injections containing arsenic, creosote, bichloride of mercury, essential oils, liquefied resins, fatty substances, and hydro-carbons.

Feb. 10, 1857.

I am, &c.

CHARLES VAUDIN.

No. 188.—TOBACCO QUERIES.—CRETINISM WITH INVETERATE SMOKERS.

Dr. Webster will, by referring to your Journal for 1852 (between July and October of that year), find his *dictum* reported in the "Transactions" of the Medical Society of which he is so distinguished a member. By referring to the Minutes, etc. of that Society, he will find I am in the right. Professor Lizars took a note of it at the time, as well as your obedient servant,

JEAN NICOTIN, M.D.

1. Is insanity common to the Turks, Germans, and French?
2. Are spermatorrhœa and impotency more prevalent with the above three nations than with us?
3. Medical Practitioners might turn their attention to a chemical and microscopical examination of the blood of an inveterate smoker, and that of a healthy subject who never learnt to smoke.
4. Our oculists, perhaps, will tell us whether nearsightedness is caused by smoking and snuff?

J. N., M.D.

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Medical Times & Gazette.

SATURDAY, FEBRUARY 28.

THE ARMY MEDICAL DEPARTMENT.

As there seems to be some impediment to the appointment of the Commission of Inquiry into the condition of the Army Medical Department, it is high time that the attention of Parliament should be directed to the improvements in the pay and position of the officers of this department which the experience of the late war proved to be necessary.

During that eventful struggle the fact was painfully and forcibly impressed on our rulers and on the nation, that an aggregate of regiments does not compose an army, and that without the auxiliary departments in an efficient state, the finest army in the world would be doomed but to destruction; hence the condition of these departments—particularly the medical department—became a frequent subject of discussion, and on each occasion the opinion gained ground that these departments were not and never had been in that position, or held in that estimation which their importance demanded, and that consequently their efficiency was much impaired. Let us repeat what we have often stated, that the members of these departments, especially the medical, not unfrequently found that much undeserved odium was attached to them for their *apparent* shortcomings, and that others really re-

sponsible were quite contented that the doctors should be made the scape-goats.

We will now, with these remarks, examine as briefly as is consistent with the importance of the subject, some of the suggestions contained in a document, entitled, "Suggestions for the Improvement required in the Pay and Status of the Officers of the Army Medical Department," a copy of which we understand has been forwarded to all the leading men in office and in both Houses of Parliament. First, as regards the change of titles of medical officers, the alteration proposed seems desirable, the more so as the designations recommended indicate exactly the duty of each rank; and, with regard to the increased *relative* rank asked for, we do not think any objection can be taken. We notice in the evidence before Mr. Stafford's Committee, that the Director-General recommends the relative rank of Captain for Assistant-surgeon after ten years' service. The only objection to this is, that every Assistant-surgeon should obtain his surgeoncy before he has completed that period, and with an improved retirement, compulsory on all ranks after thirty-five years' service, such would be the case; indeed, we trust the recommendations of the late Committee on this head will be *more* than carried out, and that there will be a permissive retirement allowed after twenty years, an improved scale after twenty-five, a *highest* rate after thirty, and a compulsory retirement, after thirty-five. Secondly, as regards the increased rates of pay proposed, we think the demands exceedingly moderate, and that no lower scale, even with the advantages of retirement, &c., will attract to, and retain in, the Army Medical Department the best class of men in the Profession—an object which, no doubt, the Government has in view. We also observe with satisfaction the recommendation that Brevet rank—of course, as in the case of the military, accompanied with some small addition to pay—should be extended to the Medical Department. At present, with no other means of reward except the bestowal of substantive promotion, it is impossible to reward deserving individuals without doing positive injustice to others; and we know that, from the impossibility of extending such promotions to all who were deserving of it, many most deserving officers have received no substantial acknowledgment of their meritorious services. With regard to the system of promotion generally, we find the Director-General, in his evidence, alluding to the difficulties attending this subject—difficulties which, we conceive, would be greatly removed by the introduction of the Brevet, and by the rules for promotions in general being defined and published. The same rule should be followed with regard to Home and Foreign service; and a public register kept, by which each officer would be able to satisfy himself that he gets his fair share of Home and Foreign stations. Another means, besides Brevet promotion, of rewarding deserving Medical officers, is the bestowal of good service pensions; and to make a reasonable sum go as far as possible, perhaps it would not be advisable to have all these pensions so high as a hundred pounds: suppose a sum of three thousand a year was granted—this might be divided into ten pensions of £100 a year, ten of £80, and twenty of £60. The rules for the bestowal of these pensions should be also made known; and, as they should be given for general good service, it might be advisable, as a general rule, that no officer until he has completed twelve or fifteen years' service should receive this reward, except in cases of unquestionable and highly distinguished services, when seniority should be waived.

These few remarks will help to illustrate the different suggestions of the document, all of which, we would again remark, are moderate and reasonable. The principle that Medical officers, without assuming military command, should receive the substantive advantages and privileges correspond-

ing with their relative rank, is one which must be supported. We are aware that some Medical officers, whose opinions are deserving of every consideration, advocate *bonâ fide* military rank being given to Medical officers; and Colonel Lord West in his evidence says he would not object to the Surgeon of a regiment bearing the substantive rank of major, as he conceives it would improve the Surgeon's social position in the regiment. This, however, we acknowledge to be a difficult question, and that much may be said against, as well as for it; but while making this admission we think that more deference than is sometimes shown to the Medical officer in this matter is quite consistent with the well-being of the service; and that the military authorities might consider that the Medical officers, as a body, are entitled to as much confidence as is placed in their military brethren. For example, during the late war in the East it was usual to have a Surgeon of some standing, and of known high character, in each of the Hospital ships—in which there was also a subaltern as commandant. Part of this latter officer's duty, he being frequently a lad of under two years' service, was to report how the Surgeon performed his duty. Is it necessary for the good of the service that a meritorious officer, conscious of an anxious desire to do his duty, should be subjected to such surveillance—may we not call it degradation—as this?

THE WEEK.

THE Bacon tragedy, as it is called, bids fair to excite as much public discussion as did the famous Palmer trial. The exhumation of Mrs. Bacon has taken place, and now her husband's body is undergoing the same process. In the case of Mrs. Bacon the moral evidence against the prisoner is once again far ahead of the scientific. There is some evidence in regard to the purchase of arsenic, there is evidence from the prisoner's wife, and there is evidence of motive for murder. It is when such cases as this come before public notice that ideas as to the necessity of a Medico-legal tribunal present themselves most forcibly. Scarcely has the first part of this inquiry ended before the public are up in arms against the Faculty. "The Doctors are at it again!" is the cry. One Doctor says that the post-mortem appearances in Mrs. Bacon are just such as would occur from death by arsenic. A greater Medico-legal authority, after looking at the same parts, states that they presented none of the appearances which are usually produced by this poison. One gentleman who attended the deceased woman for choleraic disease registered her death as from cerebral disorder, and now, losing all faith in his previous judgment, and ruled by circumstances, goes in with the others for arsenical poisoning. Arsenic—*three-quarters of a grain*—has been found distributed in various parts; antimony and mercury have been discovered, in small quantities. The symptoms described by Mr. Barber seem to be consistent, not only with arsenical poisoning, but with choleraic disorder; and the question whether the detection of three-quarters of a grain of arsenic is sufficient to lead to the conclusion that arsenic destroyed life is one on which those who are conversant with Orfila may at once have their scientific doubts. However just may be our pride in the detection of arsenic so long after death, if Bacon goes to trial for the murder of his mother, and the scientific evidence rehearsed at Stamford before the Coroner is exhibited before Judge and Jury, with the assistance of acute Counsel, the scene which must occur may be readily imagined. But why anticipate? Sufficient for the day is the evil thereof.

We are glad to see, by an advertisement that appeared in our impression for the 14th February, that the Medical Officers of the Royal Navy are about to present a testimonial to Dr. McWilliam; for the man who labours to elevate the social

position of our Profession is well worthy of the grateful acknowledgments of his brethren. Dr. McWilliam assisted so ably in the movement that resulted in the ward-room position of the Assistant-Surgeons of the Navy for a period of seven years, during which time his energy and his resources never flagged, that we feel confident the subscription list will show that the Naval Medical Officers fully appreciate the services to which they are so much indebted.

Considerable interest has been excited by an instrument which it is proposed to call an æsthesiometer, exhibited at a recent meeting of the Harveian Society by Dr. Sieveking. It is constructed for the purpose of measuring the comparative sensibility of different parts of the surface, and consists of a rod of bell-metal, graduated into inches and tenths of an inch, upon which two moveable points slide. The distance at which a person is able to distinguish the two points as two separate impressions is a test of the sensibility of a given part. Thus, a person in health is able to recognise two points at the tips of the fingers which are less than one-tenth of an inch apart; in paralytic conditions this space would widen in proportion to the amount of insensibility; and the instrument, by measuring this space, becomes a physical test of considerable accuracy of the existence and extent of paralysis of sensation. Dr. Sieveking stated that the ordinary mode of determining the amount of sensation in such cases, by pinching or pricking the patient, did not afford sufficiently satisfactory results, but that he found the instrument which he exhibited useful as an aid to the physical diagnosis of some nervous affections, and in determining by actual measurement the progress of the disease. Generally speaking, the purposes of diagnosis would be met by comparing the two corresponding points of the two sides of the body, but where an absolute standard of comparison was required, Weber's table, showing the sensibility of different parts of the body, and given in Müller's Physiology, would afford this.

Another instance has just occurred which demonstrates the apathy with which the Poor-law Board regard the well-grounded complaints of the Poor-law Medical officers, and the utter inutility of expecting any assistance from that quarter. Mr. Yorke Wood, the Medical officer of the Bury district of the Bury Union, in the county of Lancaster, has held that office for five years at an annual salary of £50, exclusive of certain fees for extras fixed by the Poor-law Board; and having found a remarkable increase in the number of cases requiring Medical assistance, he applied to the Guardians for an increase of salary. He proved to them, among other things, that the average sum paid in salary and fees for each case amounted only to *one shilling and ninepence three farthings per case*; while every case relieved by the Dispensary in the same district, during the last ten years, cost that Institution one shilling and elevenpence farthing per case for drugs alone! Notwithstanding this modest, and as it would seem, unanswerable appeal, the Guardians determined that there was no occasion for any advance of salary; and Mr. Wood thereupon memorialized the Poor-law Board, setting forth the facts of the case, and begging for redress. Mr. Wood's letter was written on the 23rd of December in last year, and that gentleman received a prompt reply from the Secretary of the Board, dated December 30; in which Mr. Wood was informed, in the usual stereotyped phrasology, that the "statement should receive their consideration." After the interval of a month, another letter was received from the Poor-law Board, informing Mr. Wood that "having considered all the circumstances, the Board do not feel called upon at present to interfere in regard to the application on the subject of the remuneration allowed by the Bury Guardians." It is quite

certain that the Poor-law Board has absolute power confided to it by the Legislature to control such mean and pitiful proceedings as those of which Mr. Wood is the victim; and it is equally certain that the Board will not use the powers which they possess, when the interests of an unfortunate Poor-law Medical officer are alone at stake. The Poor-law Surgeons must find the remedy for their grievances in a spirit of cordial union among themselves, and in a vigorous and continuous system of petitioning the two Houses of Parliament.

The attendance at the Medico-Chirurgical Society on Tuesday to hear Mr. Syme's papers was one of the largest we have seen. The fact, that the entire scapula can be removed without serious loss of blood, and that a useful degree of motion of the arm can follow, have been established by Mr. Syme, and the meeting appeared to appreciate their full importance. The paper on Impermeable Stricture did not equal the expectations excited by the title. The single object was to show that when after injury to the perineum sloughing has followed, the urine escaping by a perineal opening, and the anterior portion of the urethra being impermeable, a staff grooved on the concavity might be passed from the perineum into the bladder, and that then a staff of Mr. Syme's usual pattern, grooved on the convexity, might be forced through the impermeable portion of urethra and carried along the groove of the other staff into the bladder to serve, after the withdrawal of the latter, as a guide to the knife in forming a passage for a large catheter. The description of this operation was so obscure that Mr. Curling asked for a *viva voce* explanation, which Mr. Syme attempted to give, but he spoke so indistinctly that the reporters present were reduced to the necessity of applying to him for a correct version of what he said. However, our readers will find a full report of the meeting next week. We need hardly say that Mr. Syme was received with all the cordiality due to so distinguished a visitor.

It is satisfactory to learn that the Medical officers from forty-two Poor-law Unions have joined the Poor-law Medical Reform Association since the last list was printed. We have been requested to state, that as, since last year, many changes of residence have taken place among the Poor-law Medical officers, Mr. Griffin will be happy to transmit, gratuitously, a copy of his letter to Lord Palmerston to any gentleman whose name may have been accidentally omitted in Knight's "Union Officers' Guide" for 1857. We are also requested to state that advertisements for a public meeting of Poor-law Medical Officers will be issued as soon as a day can be named by the Chairman. In continuation of the historical narrative of Mr. Griffin's own proceedings with the Weymouth Guardians, we have now to record that that gentleman has succeeded in obtaining a copy of the resolution passed by the Guardians on the 23rd of December of last year, recommending his immediate suspension from his office. This letter was sent privately to the Poor-law Board, and we present it to our readers entire, as a most amusing specimen of impotent malignity and bad grammar.

"Resolved,—That the clerk be directed to inform the Poor-law Board, that in consequence of the antagonistic feeling of Mr. Griffin to the Guardians, they find it impossible to work harmoniously with him, and which acts very prejudicial to the interests of the rate-payers and the poor; they therefore beg most respectfully to request that the Poor-law Board will order an investigation into the conduct of Mr. Griffin, as the unanimous feeling of the Guardians is to suspend him forthwith.—PHILIP DODSON, Clerk."

Whether the Poor-law Board was puzzled with this luminous communication, or was unable to discover the antecedent "which acts very prejudicial," or was too much

in fear of public opinion and of the House of Commons, we are unable to determine; but Mr. Griffin has *not* been suspended, and we doubt very much whether his suspension can now be effected. The Poor-law Board would, no doubt, be well satisfied if Mr. Griffin could be quietly suspended or dismissed, and the authorities at Gwydyr House would be relieved of a vast load of responsibility if that gentleman could be induced to resign, and thus put an end to the existing agitation. But Mr. Griffin is a match for his antagonists, and he has the whole Profession and a great portion of the public to back him in the contest. The Weymouth Board cannot dismiss Mr. Griffin without the consent of the Poor-law Board; the latter Board cannot dismiss him, because he has committed no offence; and we are glad to know that he is determined not to resign, in spite of the annoyance and persecution to which he has been exposed.

The prospects of the Medical Reform Bill are likely to be affected by a quiet but firm opposition from the University of London and the Scotch Universities. It appears, also, that the Druggists are not satisfied with the wording of the 41st clause: "Nothing in this Act contained shall extend, or be construed to extend to, prejudice, or in any way to affect, the lawful occupation, trade, or business of chemists and druggists." They ask, what is to be considered their *lawful* occupation? and raise a bold front against restrictions upon counter-practice. This is nothing more than has been anticipated, but we trust it is not too late to disarm the opposition of the Universities. It is too much to expect the Government or the House of Commons to pass a Bill opposed by a large and influential section of the Profession. The cry still is, "Agree among yourselves, and we will listen to you." The appearance of agreement was never so manifest as at present; the corporations have made large concessions; and we trust that it may not, even now, be too late to show that doctors do not differ when the public interest calls for agreement.

The important subject of Excision of the Knee-Joint was brought before the Medical Society of London last Saturday, by Mr. Price, in a very able practical paper. The author contended that in properly selected cases it was a very superior operation to amputation; those to which it was especially adapted being cases of scrofulous disease of the knee-joint, commencing in the cancellated tissue of the tibia and femur. He argued that great advantage was gained by not removing the entire epiphyses, first because bony union was more likely to take place, and secondly, because should unhealthy inflammation arise, the mischief might be confined to the epiphyses if they had not been removed. Especial stress was laid on the necessity for fixing the limb securely after the operation in a proper splint, to prevent the bony surfaces from being rubbed together by movement or muscular action. A discussion of considerable length followed, but no new facts were elicited. We have great pleasure in congratulating so young a surgeon as Mr. Price in having had three consecutive successful cases of so very important an operation.

It is high time to ask what arrangements are to be made by Government to prevent the importation of diseased cattle. The losses our agriculturists experienced from the introduction of sheep from Holland suffering from small-pox are too recent to be forgotten. They should put us on our guard against a fatal epidemic which has ravaged Central Europe during the last two years. It has reached Königsberg, where one proprietor is said to have lost three hundred head of cattle in one night. It was expected at Hamburgh; and there can be little doubt that, once there, the weekly shipments to the English markets will include diseased animals; and then, as the stage

of incubation may be prolonged, these animals might, under the present regulations, be readily admitted into this country. The absurd objections to quarantine regulations promulgated by the Board of Health, led to the most culpable negligence in the case of cholera-patients arriving from Hamburgh, but they may possibly be met now that the pockets of the landed interest are threatened by importation of diseased cattle from the same port.

The Annual Course of Lectures at the College of Physicians was commenced on Wednesday last by Dr. Garrod, who has chosen for the subject of the Gulstonian Lectures, Diabetes, and the Saccharine Conditions of the Urine. The first lecture was devoted to a consideration of the symptoms of the disease, and the chemical characters of the urine; the succeeding lectures will comprise the pathology and treatment. The opening lecture was well attended by the fellows and members; and the new President of the College, Dr. Mayo, made his first appearance in public in his official character.

REVIEW.

Of Nature and Art in the Cure of Disease. By SIR JOHN FORBES, M.D. D.C.L. (Oxon), F.R.S. &c. London: 1857. 8vo. Pp. 264.

EVERYTHING which comes from Sir John Forbes is sure to be received with respect and attention; and especial interest will be excited by the present exposition of the views promulgated by Sir John twelve years ago in his famous article "On Homœopathy, Allopathy, and Young Physic." The evils of polypharmacy, and "of that meddlesome and perturbative practice still so predominant in this country," have undoubtedly been very much diminished by the effect produced on the medical mind of this country by that article. Sir John, however, seems to think a still further corrective is required, and he devotes a portion of his leisure to the completion of this part of a manuscript which "has lain by me for several years, and is still incomplete."

After two introductory chapters, and four others on diseases, their causes, mode of production, and nature; their course or progress; and natural terminations; we have a chapter on the evidence of the curability of diseases by nature. This power is illustrated by the pathology of the inferior animals, the medical history of savage or uncivilized nations, the history of bodies of men far from medical aid, the sequence of inert systems or modes of practice, and the proceedings of impostors and quacks. Sir John thinks that many of the cases recorded in modern medical records, show not simply the power of nature to overcome natural disease, but to overcome this and the artificial disease superadded by the energetic ignorance of the practitioner. But the great example of the curative power of nature is that afforded by homœopathy, the patients being treated "nominally by drugs, but actually left to the resources of nature, or at most aided, it may be, by regimen and faith." The whole of the chapter is well worthy of attentive perusal. Did space permit we should gladly give a full analysis not only of this chapter, but of those which follow, on the existence and general nature of the medical art, the instruments of the medical art and their mode of action; but we must pass on to the concluding general estimate of the powers of the medical art. This following quotation may be taken as a very fair exponent of Sir John's estimate of these powers.

"According to the lowest estimate that can be justly formed of the Medical Art, it must still hold its pre-eminence as one of the greatest boons that human intellect has ever elaborated for the benefit of man's estate. With all its feebleness and all its uncertainties, it possesses, and must ever possess, a sufficiency of solid truth and solid power to make it worthy of the study and pursuit of the noblest intellects and the tenderest hearts. But I will venture to go still further in the attempt to restrict the power—or rather to define the real power of the Medical Art, without any apprehension of thereby degrading it.

"Not only in the pestilential epidemics referred to, but

even in milder zymotic fevers, in the acute visceral inflammations, and in several other forms of acute disease of severe kind, the power of the Medical Art seems to be very circumscribed. This is proved by the facts brought to light in the various fields of observation and experiment, so often referred to in this volume, in which nature works her own ends either entirely unfettered by art, or fettered by it in a degree so slight as to be incapable of modifying the results in a sensible manner. Such a conclusion, even if demonstratively proved, would still leave a wide field for the beneficial action of the Medical Art, even in this class of diseases, as a reliever, as a helper, and even as a healer, although the higher issues of life or death were not left at its disposal. It would still be in the power of the medical attendant to restrain occasionally, at least, over-action when distressing; to compose many functional disturbances; to allay pain; to procure sleep; to relieve uneasy sensations; to lessen morbid heat; to dispel morbid cold; to allay thirst; to free the bowels when painfully constipated; to check diarrhoea; to check or mitigate local inflammations, and feverishness in general; to institute a regimen calculated, either positively or negatively, to aid the conservative and restorative processes; to allay apprehension; to inspire confidence;—in a word, to exercise all the functions and perform all the offices of an intelligent and benevolent helper of the sick. That, in so doing, many lives that would otherwise be lost must be saved, can admit of little doubt, whatever statistics may report; and that sufferings from the disease may be thereby greatly lessened, and its course shortened, can admit of no doubt at all. I will venture to add, that unremitting attention to these seemingly small matters, and the administration of remedies rather as auxiliaries towards a cure than as positive means of cure, will bring about results of an infinitely more satisfactory kind, than can await the efforts of the physician who disdains to take up so humble a ground of action, but persists in seeking to vindicate for himself and for his art, the heroic character of a controller of nature, and a conqueror of disease."—Pp. 261—3.

Yet the question will obtrude itself, Whether, after all, a rational empiricism will not do more to help us onward towards the great end of all our study—the diminution of human suffering, the preservation of human life—than even the most careful observation of the natural history of disease, or the most elaborate chemical, microscopical, or pathological researches. We have not many true remedies, but we have some. We can cure scabies with sulphur; but though the discovery of the *Acarus* explained the action of the remedy, it did not teach its use. We can cut short the course of an intermittent by quinine, but who can say how the remedy acts? We can reduce an enlarged spleen by bromide of potassium, but here, again, our knowledge stops. Who can tell how iodide of potassium controls the action of the syphilitic poison in bone and fibrous tissue? how colchicum relieves the acute pain of a fit of the gout? how mercury leads to the absorption of effused fibrine? how lemon-juice cures scurvy? how opium produces sleep? For these,—indeed, for almost all those remedies which we can point to as possessing certain definite and specific powers,—we are indebted to accident, tradition, observation, or experiment. On the other hand, the tendency of modern Medical research has been towards the adoption of a purely expectant practice; and we must take care that while avoiding the evils of polypharmacy and meddlesome interference with nature, we are not led into the opposite extreme—that we are not so much engrossed by the study of the natural course, progress, and terminations of disease as to neglect the search after new, or the endeavour to define the power and improve the application of old, remedies. With this caution we can recommend Sir John Forbes's volume most strongly to our readers, and we trust that the additional volume half-promised in the preface may not be long in making its appearance.

POOR-LAW MEDICAL REFORM.

ST. THOMAS'S HOSPITAL.—At a meeting of the Students of St. Thomas's Hospital, held on Tuesday the 17th, in the large theatre of the college, the following Resolutions relative to the Poor-law Medical Reform movement were adopted.—E. Clapton, Esq., M.B., in the chair:—1. Proposed by Mr. W. Clapton, seconded by Mr. Bone,—That this meeting views with great dissatisfaction the very inadequate remuneration

of the Medical men holding appointments under the present Poor-law regulations. 2. Proposed by Mr. Mullinger, seconded by Mr. Shea, B.A.,—That this meeting considers, that under the present system it is impossible for the parish Medical officers to afford proper attendance and medicine to the suffering poor placed under their care. 3. Proposed by Mr. Gervis, seconded by Mr. Payne,—That this meeting most cordially agrees with the spirit of the Resolution adopted by the University College Students, to the effect, that unity of purpose and good faith among the members of the Profession are of vital importance to the cause of Poor-law Medical Reform; and therefore desires to express its disapproval of those members of the Profession, both Practitioners and Students, who not only treat this movement with apathy and contempt, but even act contrary to its principles. 4. Proposed by Mr. Bateson, seconded by Mr. Armstrong,—That this meeting pledges itself to act in concert with the Students of other Hospitals, in any united efforts for the furtherance of the above objects. 5. Proposed by Mr. W. R. Williams, seconded by Mr. Bedford,—That an aggregate meeting of the Students of the Metropolitan Hospitals, for the expression of an unanimous opinion on the subject is desirable, and that to this end two delegates be selected to represent the school at the Preliminary Committee. 6. Proposed by Mr. E. Woakes, seconded by Mr. Skardon,—That the thanks of this meeting are due, and very cordially proffered to Mr. Griffin, for his energetic and persevering exertions in this movement. 7. Proposed by Mr. A. Clarke, seconded by Mr. Woodhouse,—That as a practical expression of sympathy, a subscription be opened, and the sum collected be forwarded to the account of the Association at Williams's Bank. 8. Proposed by Mr. Evan Jones, seconded by Mr. E. R. Ord,—That in order to carry out the objects of this meeting, a Committee be appointed, consisting of a Chairman, Secretary, Treasurer, and six members. 9. Proposed by Mr. Footner, seconded by Mr. Moreton,—That copies of these Resolutions be forwarded to the leading Medical Journals. 10. Proposed by Mr. C. Clark, M.A., seconded by Mr. Hilditch,—That the thanks of this meeting be given to E. Clapton Esq., for his kind and able presidency on the present occasion.—HENRY GERVIS, Honorary Secretary.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—The Annual General Meeting of this Society, for the election of Officers and other Members of the Council for the ensuing year, to receive the Auditor's Report, the Report of the Council, &c., will be held at 53, Berners-street, on Monday, the 2nd of March next, at 8 o'clock in the evening precisely. Balloting lists will lie upon the table of the Society seven days previous to the day of election. The sanction of the meeting will be required to the arrangements proposed to be entered into with the Pathological Society, for permission to meet in the rooms of this Society. The following is the list of Officers and other Members of Council nominated for 1857-8. *President*.—*Charles Locock, M.D.; *Vice-Presidents*.—*George Budd, M.D., F.R.S.; *Seth Thompson, M.D.; Richard Quain, F.R.S.; *James Dixon. *Treasurers*.—George Cursham, M.D.; Thomas Blizard Curling, F.R.S. *Secretaries*.—*Andrew Whyte Barclay, M.D.; Spencer Smith. *Librarians*.—William Wegg, M.D.; John Birkett. *Other Members of Council*.—*Arthur Farre, M.D., F.R.S.; *Henry Hunt, M.D.; *John Snow, M.D.; Alexander Patrick Stewart, M.D.; *Frederick Weber, M.D.; *Edward Cock; Henry Lee; George David Pollock; George James Squibb; *Nathaniel Ward.

MARRIAGES IN IRELAND.—The sixth report of the Registrar-General of Marriages in Ireland appeared in print on Saturday. The following is a brief summary of its statistical details:—In the year 1855 (the last reported) there were 8765 marriages in Ireland, against 9426 in 1854, 10,197 in 1853, 9487 in 1852, 9339 in 1851, and 9781 in 1850. This is equivalent to a reduction of 7 per cent. as compared with 1854. It is remarkable that the decrease in the number of marriages is confined to Ulster, an increase having occurred in Leinster, Connaught, and Munster. The married of 1855 included 405 males and 1551 females under age, 1163 widowers and 610 widows, and 2260 men and 3674 women who were too illiterate to sign their names.

* Those gentlemen to whose names an asterisk is prefixed were not on the Council last year.

OUR GREAT ONES OF THE PAST.

RICHARD MEAD, M.D., F.R.S.—Continued from page 174.

THE extended friendships which Mead made were all of the firmest kind: Cheselden, Garth, Arbuthnot, Pope, Newton, Halley, Burnet, Watson, Boerhaave, Pitcairn, Swift, and Sir Hans Sloane; these and others little less illustrious, were his friends and scientific allies. Did any man ever before or since form the centre of such an immortal circle of genius, industry and knowledge?

The only man almost with whom he was at variance was Woodward, the naturalist and doctor. Woodward was unfortunate generally in his friendships, for the reader will remember that between him and Arbuthnot no love was lost. Why this dislike, is rather difficult to say, for Woodward was an able man and independent. Master Wadd, gossipier in general on things medical, gives an anecdote about Mead and Woodward which will bear recital.

In the prints of Ward's Lives of the Gresham Professors, is a view of Gresham Gateway, entering from the Broad-street, and marked No. 25. Within the gateway are two figures, one standing the other kneeling. These are Dr. Mead and Dr. Woodward. Woodward had done something professionally which offended Mead; Mead, therefore, meeting him in this place, when returning to his rooms in the College, drew, as did his adversary. In the combat Mead got fairly the advantage, and commanded poor Woodward to beg for his life. Woodward's answer was couched in excellent wit. "*No, Doctor, that I will not till I am your patient.*" But Mead was inflexible, Woodward had to submit, and the picture represents him in the act of yielding up his sword.

The hush of suspicion over, and the scandal-monger thrown aside, it is a just tribute to Mead to say, that but for his energy and assistance the Foundling Hospital would in all possibility have never been erected. To this great institution he was one of the first contributors; and Captain Coram, the founder, was urged on to his work by the arguments of his Esculapian friend.

"In like manner," says our Britannique historian (a), "he persuaded Guy, the wealthy citizen, to lay out his immense fortune in building a new hospital for the reception and maintenance of the wretched and indigent who are discharged out of all others as incurable." After the death of the first president of Guy's, the office was offered to Mead, who declined it on the grounds, it has been presumed, that in his opinion the intentions of the founder had not been carried out by the managers.

"Gold-headed Cane," who, like ourselves, begs hard from the Britannique gentleman, tells us that in 1746 he accompanied Mead to the house of Mr., afterwards Sir, William Watson, in Aldersgate-street, to witness some experiments in electricity. A Leyden jar, then a new invention, was produced, and the Duke of Cumberland, recently returned from Scotland, took a shock from the point of the sword with which he had fought the battle of Culloden. "Two years after," continues the same authority, "we witnessed the famous experiments made on the Thames and at Shooter's Hill, in the presence of the President and several of the Fellows of the Royal Society; in one of which the electrical circuit was made to extend four miles, and the result of the experiment was, that the velocity of electricity seemed to be instantaneous."

As illustrating the attention which Mead was accustomed to show to every useful invention, we may refer to his exertions in behalf of Mr. Sutton, a gentleman who invented a new mode of ventilation. A history of this is given in Mead's works, together with a preface from him, and a short treatise on Scurvy. Mr. Sutton's plan of ventilation was proposed for ships chiefly, and was formed on the principle, "that a fire being always kept on board a ship, and a pipe or cavity made to the well, one end of it being heated by fire, a change of air would follow, and by this means be rendered sweet and pure, and fit for respiration."

This description, supplied by Mr. Sutton himself in a letter to Mead, is followed by a history of the mode in which the

suggestion was accepted by the ruling powers of that day. Admirable circumlocution office business is here recorded. Mr. Sutton obtained an introduction to Sir Charles Wager, and Sir Charles, pleased with the scheme, sent him to Sir Jacob Ackworth, Surveyor of Naval Works, with a letter of introduction. Sir Jacob supported the official character by ordering Sutton to call again in five days, at seven in the morning. Sutton obeyed, and was there at his time; but Sir Jacob was engaged, and Sutton had to kick his heels in the office until the evening, waiting the great man's pleasure. When admitted the following was the scene:—

Sir Jacob.—"Sir, I suppose you intend to throw air into the wells of ships."

Sutton.—"No, Sir; I propose to draw it out by means of fire."

Sir Jacob, "wishes to know how far he was to draw it out."

Sutton answers, "Not six inches; for, if he could extract it never so small a distance, the incumbent air would press forward of course, and in so doing would cause a constant change."

Sir Jacob "admits the fact."

Sutton, relieved, "hopes, therefore, that Sir Jacob will appoint a time for an experiment to be made to test this scheme."

Sir Jacob replies, "that no experiment shall be made if he can hinder it."

The official donkey having thus delivered himself, poor Sutton retires—first, to get something to eat, and then to do a petition to the Lords of the Admiralty. The Lords gave an order for him to try his plan on board the "Greenwich" man-of-war, then lying at Woolwich. He at once began to fulfil the order, placed his pipes, and had all things necessary for his experiment, except the soldering of two pipes; but the official donkey, again,—while the solder was hot, and the plumber ready—sent a messenger from the Builder of His Majesty's yard, and ordered the workmen ashore. Indignantly, Sutton hastened to the Builder; Builder, up to his work also, acquainted Mr. Sutton respectfully that he must apply to the Navy Board at Woolwich, to obtain an order for his experiment. But Sutton has an order direct from the Lords. But the order direct from the Lords will not do. He must petition the Navy Board; and the Navy Board must petition the Lords, and the Lords must return their order to the Navy Board, and the Navy Board, if it approves, must forward its order to Mr. Sutton, and then the first step in the business will be got over in an official manner. Sutton, still indignant, insisted the more, and at last, to placebo him, the Master Builder promised that the soldering should be done that night. It was all fudge; next morning things were as they were, and a short time afterwards the master-afloat was sent to take down the pipes and plug up the holes. Official donkeyism was triumphant!

In this dilemma, Sutton applied to Dr. Mead. He went direct to the Doctor's house, where he met Martin Folkes, President of the Royal Society. Both Mead and the President expressed their approbation, and the former soon after waited on the Lords of the Admiralty, and represented to them the great importance of the matter, whereupon they ordered that it should be tried on any of His Majesty's ships in the river.

After endless annoyances the experiment was prepared on a hulk at Deptford, in September, 1741. Mead went there, Folkes, and the Lords. Sir Jacob Ackworth was there, of course, and doing the official, was again pleased to say before them all that he was sorry they came so far to see so foolish an experiment; that he had himself tried it yesterday, and it would not shake a candle. The experiment, in spite of this, succeeded, and the "Norwich" man-of-war was fitted up under Mr. Sutton's supervision. But soon there came in a new ministry, and the inventor was again thrown out of patronage, receiving for all his trouble and time only £100. Dr. Hales' ventilating bellows obtained the ascendancy.

On February 11th, 1741-2, Dr. Mead brought Sutton's invention before the notice of the Royal Society, and on April 1st, Mr. Watson added another paper to the Society on the same subject, and after many years letters patent were obtained, authorising the general application of the scheme to

(a) Hutchinson, in his *Biographica Medica*, takes every word he has to say about Mead from this writer, except the story about Leake, which he has from Bowyer. He acknowledges neither author.

the whole navy. A copper model of Sutton's plan of ventilation was deposited by Dr. Mead in the Museum of the Royal Society. The plan fell ultimately into disuse.

Mead's discourse on "Scurvy" is an interesting paper, giving the pathology of the disease, and the treatment by the use of vegetable acids. Some curious anecdotes are here and there supplied to illustrate various points. He records also a conversation with Lord Anson, the famous voyager, with whom he seems to have been on very friendly terms.

In the year 1747, Mead brought out his treatise on "Small-pox and Measles," and announced for the first time in a special work his views as to the treatment of the former disease. A considerable part of the work he wrote many years before. He says that, in 1708, he observed that many of the patients in St. Thomas's Hospital, suffering from a malignant small-pox, were saved, beyond expectation, by a looseness seizing them on the ninth or tenth day of the disease, and sometimes earlier. This led him to try the effect of administering laxatives in the decline of the disorder; and finding the plan succeed he adopted it, and was supported in his views and practice by Friend, who lost caste for his pains, and was obliged to defend himself warmly.

It has been already said that Woodward originally disputed on this small-pox question. Mead never forgave this offence, but twenty years after the death of his opponent, *i.e.* in the preface of the book now before us, gave vent in merciless terms to his pent-up indignation. Hardly worth the trouble of any man to bottle up anger so long! Thus he writes:—"In front of this band" (those who opposed Friend) "stood forth Dr. John Woodward, Physick Professor at Gresham College, a man equally ill-bred, vain, and ill-natured, who after being for some time apprenticed to a linen-draper, took it into his head to make a collection of shells and fossils, in order to pass upon the world for a philosopher; thence having got admission into a Physician's family, he at length, by dint of interest, obtained a Doctor's degree. This man published a book, entitled 'The State of Physick and Diseases,' wherein he took great liberties with Dr. Friend, but pointed his arrows most particularly at me; and these were neither arguments nor experiments, of which he had none, but barefaced calumny and raillery, which he poured forth in abundance."

To the treatise on the Small-pox, Mead added a translation of Rhazes' treatise; the Arabic copy he obtained from his "good friend the celebrated Dr. Boerhaave," of Leyden. But as it proved to be full of faults, he employed Solomon Negri, a native of Damascus, and John Gagnier, Arabic reader at Oxford, to turn the treatise into Latin. These gentlemen did the work with diligence, but as the two versions differed, Dr. Thomas Hunt, Arabic Professor in the University of Oxford, collated the two Latin versions with the original, and out of them, in Mead's presence, compiled the added translation.

A difference of opinion existed between Mead and Boerhaave in regard to small-pox. Mead did not, on his part, believe in the cure of the disease without suppuration. Boerhaave would not accept the purgative treatment.

As his declining years released him from Medical fatigues, Mead devoted his time to the writing of the "Medica Sacra," a strange production, including chapters on the disease of Job; the leprosy, the disease of Saul, Jeroboam, and Hezekiah; the disease of old age; the disease of Nebuchadnezzar; the palsy; demoniacs, and such like subjects, concerning all which we need only say in brief, that our author in attempting the Divine lost the Physician.

His last work was "The Medical Precepts and Cautions," a series of instructions selected without order from his loose papers; in this work the Physician is himself again. Apoplexy, madness, pleurisy, fever, and many other diseases are here discussed with much care and common sense; but the time has gone by for their application to practice. Now and then he relates a curious fact; as, for instance, the treatment of Dame Mary Page, who died in his time. Her monument, he says, is still in Bunhill-fields, and on it is inscribed, by the patient's own request, the following:—

"Here lies Dame Mary Page,
Relict of Sir Gregory Page, Bart.
She departed this life March 2, 1728.
In 67 months she was tapped 66 times:
Had taken away 240 gallons of water,
Without ever repining at her ease,
Or ever fearing the operation."

Mead speculates as to where the water came from, and

thinks it must have been from the ovaries. He was the first to recommend firm pressure on the body after the tapping operation.

In various passages written at this period, Dr. Mead took occasion to revise and comment on many of his former views and opinions. The dread of inconsistency, which Emerson tells us is the hobgoblin of weak minds, haunted him not. He dared to examine, and explain, and retract his own earlier views. Death caught him quickly after the issue of the precepts and admonitions. On Saturday, February 16, 1754, being then in his eighty-first year, he sank placidly into the unknown, after a few days' unsuffering illness. Three years before death he became very corpulent, and his faculties failed him; but his geniality and love for his fellow-men remained ever unchanged. He was buried on the 23rd in the Temple church, near his brother Samuel, counsellor-at-law. A monument was there erected to his memory. Afterwards his son Richard (who, by the way, had a legacy of £800 left him by Lord Chief Justice Reeves) erected to his memory an honorary tomb in the north aisle of Westminster Abbey. The tomb bears an elegant inscription by Professor Ward, and is surmounted by an admirably carved bust.

He did not die rich, £20,000 being all that was left from him, but his family were well cared for. His second daughter married Charles Bertie, Esq.; his eldest, Dr. Edward Wilmot; and his youngest, Dr. Frank Nichols. These last-named gentlemen were Physicians in Ordinary to the King.

A marble bust of Mead was taken by Roubillac, and was presented afterwards to the Royal College of Physicians by Dr. Askew; a portrait of him was etched by Pond, another by Richardson; a mezzotinto was taken by Houston from a portrait by Ramsay; and a medal of him was struck long after his death by Lewis Pingo.

The house in Great Ormond-street which Mead occupied is now the Hospital for Children. At his death the vast treasures this house contained, its library of 6592 numbers, its statues, pictures, and antiquities, were sold by auction, and dispersed to the four quarters. Many of his pictures brought immense sums of money.

We have sketched out the lives of several of our illustrious dead, but on no man yet have we alighted who in his day had so great and universal a celebrity as Mead. Indeed, there is possibly, in our biographical literature, but one other who gained in his life-time so general a reputation. Boerhaave, his contemporary, fellow-student, and beloved friend, is the exception; and even he, despite the story that a dweller in the celestial empire of China wrote him a letter, addressed, *Dr. Boerhaave, Europe*, did not achieve a greater renown. The King of Naples wrote to Mead, requesting a complete collection of his works; and in recompence forwarded to him the first volumes of Signor Bajardi's work on Antiquities, and invited him to his own palace, an invitation which was only unhappy in that it came too late. "The scarce and perhaps the only copy of Servetus' last book," says the Britannique writer, "passed from the shelves of our English worthy to those of his friend," Mr. de Boze. When the Government wished for information on medical matters they sought out Mead, and when the colonies or the counties wished for physicians, they left the choice of such, safely to his care. Young men going forth under his patronage met with the kindest attention; he asked in return only for a note of their observations and doings; while, to every good thing they did he accorded every honour. A Whig in politics, he was too liberal to let political rancour efface merit or destroy friendship.

Filled with a true ambition he courted only such notoriety as was honourable, and he even possessed the courage to decline the Presidency of the College of Physicians, when, by his enfeebled age, he was admonished that the trust were better left in younger and more active hands. Such were the mental traits of Richard Mead, and by these, rather than by any great profundity of intellect, he prospered. He had neither the brilliancy of Arbuthnot, the practical shrewdness of Wiseman, nor the genius of Harvey; but his classical learning was greater than theirs, and at his crowded banquets he often was the only man that could hold converse with the visitors from various nations who flocked around his table. His forte lay not in original thought, but in an ability of appreciating what was original in others; not in imagination, but in memory; not in keen all-seeing, over-seeing perception, but in calm, careful, industrious observation. Men of this class are rare, but

when they are, they are the commanders of their time. They are the ballast of the science ship, and he who walks the deck would topple over without their presence. To them even greater men show respect; and if they embellish the age in which they live by no splendid triumphs or outpourings of genius, they give to it a tone and a solidity which preserves it in history as an age of progress without rant, and of knowledge without cant. Richard Mead was one of these common-sense ballast-men, and in his time and in his vocation he played his part second to none. His chosen motto was his life's precept—*Non sibi sed toti*.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

DISCUSSION AT THE PARIS ACADEMY OF MEDICINE.

UPON THE

TREATMENT OF OVARIAN CYSTS.

THIS discussion, which had been continued over many meetings, has recently terminated, and a concise summary of the opinions advanced will no doubt be of some interest to our readers. They will learn with some surprise that the operation of ovariectomy under any circumstances is absolutely ignored by the French surgeons; and the cases in which neither the palliative treatment nor the treatment by iodine is admissible, are quietly left without any attempt being made to avert certain death. A shuddering horror is expressed at the rash conduct of British and American practitioners, as if none but the most prudential surgery ever prevailed on the other side of the Channel; disbelief is expressed at the amount of success recorded, while the mistakes in diagnosis, which it must be acknowledged have been of too frequent occurrence, have evidently made an impression greater than is justifiable.

The discussion was occasioned by the relation of a case by Dr. Barth. The patient, 37 years of age, had suffered from ovarian disease during two years, when, on the 10th of March, two punctures were made in such a way that a gum-elastic tube, pierced with holes, was passed in at one and out at the other so as to allow of the tumour being retained against the abdominal wall while its contents could be discharged and injections thrown in. We may mention, *en passant*, that this mode of procedure, or that of leaving a canula in the opening, was generally disapproved of by the Academy. Ten days afterwards an iodine injection was thrown in, and repeated for some days; the tumour diminished in size, but the patient getting tired, left the hospital. On the 26th of May, however, she was brought back in the pains of child-birth, although she had been quite unaware of her pregnancy, and was delivered the same day of a five months' child. Acute peritonitis followed, and she died on the 28th. At the autopsy, the cyst was found half filled with the same albumino-purulent fluid that had flowed through the canula during life, while at its upper part was a round opening the size of a sixpence, through which some of the fluid had gained access to the peritonæum. Behind the tumour, the uterus had contracted, and presented the appearances usual after delivery.

M. Malgaigne commenced the discussion by raising the question, whether these tumours should be let alone or treated by palliative punctures. Such punctures are, as a general rule, inoffensive, and give relief; but while women are found coming to the *Bureau Central*, undergoing the puncture, and walking home again (!), others of them die within the twenty-four hours. When danger of suffocation exists, however, puncture is evidently called for. As to the curative powers of iodine injections, he believes the reputed cases require verification; while, if they have really taken place, Nature may have effected them in spite of the Surgeon. Some amount of contraction of the cyst may be determined by the iodine; but, as this is only limited, a dangerous fistulous opening may be left. As at present advised, he does not go beyond mere palliative puncture, and that only in certain cases.

M. Moreau observed, that the coincidence of these cysts with pregnancy is by no means rare; several of such cases having come under his notice, which, while the cysts were

large enough to require puncture on account of the obstacle they placed to delivery, yet had they not interfered with the progress of pregnancy, which reached its full time. He believes the best plan is to meddle with ovarian tumours as little as possible, for some patients have these cysts for fifteen or twenty years without their health being inconvenienced. When they make considerable progress, palliative punctures are alone called for. In one of M. Moreau's patients these were performed twenty-eight times in twenty-eight years, and in another 110 times.

M. Cazeaux has paid much attention to this subject, and he is certain that cures may be obtained by means of iodine injections; for he has seen some of M. Boinet's patients three and five years after, when all that remained was a solid tumour, about the size of the foetal head, possessing none of the characters of cysts. The treatment is not applicable to multilocular cysts, or when there are malignant complications, and when, from faulty diagnosis, it is resorted to in such cases, death may be the result. Ovarian cysts are by no means so inoffensive as stated by M. Moreau, and the retention of health in spite of their presence is quite exceptional. Tapping generally becomes indispensable; and after this has been repeatedly performed a fatal result usually takes place at the end of a few years. M. Cazeaux also regards the complication of pregnancy by these cysts as a much more serious occurrence than M. Moreau represents it.

M. Velpeau believes that perhaps in the majority of cases women having these tumours may enjoy tolerable health for 10, 20 or 30 years—in fact, the mean of ordinary life: but still there are others not so fortunate, but who succumb within the first ten years, whether from the excessive development of the cyst, its inflammation, the tapping it has rendered necessary, or intercurrent diseases. As to the palliative tapping M. Velpeau had performed it so often that he had come to look upon it as a very simple affair, when he lost several patients in the course of a single year. As, for a reasonable chance of effecting a radical cure in these cases, the woman's health must be tolerably good, the surgeon is placed in the dilemma of determining whether he shall propose to a woman in good health an operation which may kill her, or abandon her to a disease that may become dangerous. Great as has been M. Velpeau's employment of iodine injections in other circumstances, he has always felt reserve in using them in ovarian cysts. Numerous facts have shown him that they exert remarkable power in dropsies of serous membranes, and that their success is less in proportion as the surface to be modified differs in structure from these. In cysts containing uncoagulated blood they may still exert good service; but they are of less use when the contents are gelatiniform, still less when puriform, and scarcely of any utility when the parietes resemble mucous membrane in structure. Observing the success of others, M. Velpeau has latterly had recourse to these iodine injections himself, and with some good results; and as he believes the injection of the iodine does not add to the danger of tapping, he thinks there is no reason why an attempt at curative should not be substituted for mere palliative treatment.

M. Demarquay detailed to the Academy the result of several cases treated by himself and M. Monod. He believes that emptying these cysts all at once, when large, excites disturbance of the system, and presents too large a surface for the efficient action of the iodine. Availing himself of the retractibility which takes place in the cysts, he first only draws off one half of their contents; and then, a week after, when the walls of the abdomen and of the cyst have retracted, he removes two-thirds of what remains, and some days later completely empties the cyst by a third puncture, and throws in the iodine into the now diminished cavity. A large trocar should be used, and the entrance of air guarded against.

M. Trousseau.—In the majority of cases ovarian cysts constitute neither a disease nor an inconvenience; that is to say, when their dimensions are small, as that of an orange or less, in which state they are often met with in the bodies of the aged. The bursting of simple serous cysts also gives rise to no ill effects. M. Trousseau never met with a case of their spontaneous absorption, unaccompanied by inflammatory action. We must always bear in mind that these tumours, like fibrous bodies of the uterus, may, under the influence of the menstrual *molimen*, acquire a great size, and then diminish again; and the diminution that has taken place in some cases

during the employment of iodine may in this way be explained. The results of palliative tapping would probably be more fortunate, if it were practised when the cyst is small, *i.e.* not exceeding a child's head in size; for, in the case of inflammation supervening upon the operation, this is less severe in proportion to the smaller size of the cyst, while the walls are more retractile, not having yet assumed the morbid conditions they will do at a later period. As to iodine injections, feeling somewhat afraid of them, M. Trousseau has not yet sanctioned their employment in any of his patients, and he questions the durability of the cures said to have been obtained by others.

M. Jobert observed that, although simple tapping is regarded by some as an operation devoid of danger, under certain circumstances it is a very serious one. A capital distinction should be made between *adherent* and *moveable* cysts, the operation never in the former case being attended with danger, while in recent, free, floating cysts, the fluid may get into the cavity of the peritonæum, and give rise to fatal diffused peritonitis. To prevent this, the canula should be maintained *in situ*, in order to determine adhesive inflammation between the contiguous surfaces of the cyst and the abdominal wall. No accidents have ever followed M. Jobert's operations when thus conducted. He has never observed a cure to result from simple tapping; but in two cases it has done so after multiple punctures, which have been followed by the deposition of plastic lymph in the substance of the tumour, and the obliteration of the sac. He has employed the iodine injections in thirty cases, and has never, observing the above precautions, met with any serious accident. In several cases a relapse has occurred, although the tumour had seemed to have been completely obliterated. So far from exciting inflammation, the iodine arrests it when present; just as in the case of hydrocele, it at once moderates the symptoms of orchitis. The greatest analogy, in fact, prevails in the results obtained from its injection into the tunica vaginalis, and into these cysts. At first the fluid is reproduced, giving to the cyst its original size; but it then becomes condensed and concretes. M. Jobert regards these injections as inoffensive, providing that the inflammation by which they are followed does not extend over too large an extent. Evidently, a cure cannot always be looked for, *e.g.* in cysts having cartilaginous walls, or containing malignant deposits, and multilocular cysts have been placed in the same category. In a case of multilocular cyst of the thyroid, however, M. Jobert dispersed the whole tumour by injecting one of its cells; and he has known a complete cure of a multilocular ovarian cyst take place after six applications of electricity. To sum up: palliative tapping is never dangerous when there are adhesions to the wall of the abdomen. Puncture, leaving a fistulous opening, is a dangerous proceeding. Iodine injections and electricity, exempt from serious inconveniences when carefully employed, may lead to a cure, without our being as yet able to explain the mechanism of their operation.

M. Piorry observed, that when the walls of the cyst are thin the chances of success with the iodine are much greater, while they are very slight when these have become thickened, and firm, and formed of different tissues, or of fibrinous, or even cretaceous substances. Very large cysts, which induce dangerous symptoms by their compression, must be tapped, whether adherent to the walls of the abdomen or not; and such palliative tapplings may prolong lives for many years that would otherwise have been lost by the progress of the disease. For a long time past M. Piorry has advocated, like M. Demarquay, the discharging a portion of the fluid first, and only injecting the iodine at a later period. When with a very large cyst, there exist also several small ones, iodine injections are indicated; and if two or three of large size are detected these may be successfully attacked. The partitions of these cysts may also be perforated with the trocar, so as to discharge their contents at a single external opening; but when there are a great number of cystoid tumours united into a mass, palliative puncturing is alone indicated. When, independently of the large ovarian cyst, solid, irregular, adherent productions co-exist, little is to be hoped from the use of iodine; but while employing palliative puncture of the cyst, the solid tumours are sometimes favourably influenced by douches, iodine frictions, and in certain cases, even by a kind of shampooing and compression. Early tapping of an ovarian cyst is indicated, when, by its thrusting the viscera towards the thorax it threatens suffocation; when the compression of the

vena cava and vena porta induces ascites or œdema; when the passage of matters through the alimentary canal is obstructed, or when painful prolapsus of the uterus is induced. In general, too, an ovarian cyst, which by the abundance of fluids it gives rise to induces extreme hypœmia, will be advantageously treated by its prompt evacuation and the throwing in of iodine. An ovarian cyst containing pus should be opened only after adhesions have been induced between it and the abdominal parietes. Then, its contents should be completely evacuated either by puncture or large incisions, its interior washed out, and iodine injections thrown in daily until pus ceases to flow.

M. Piorry is of opinion that, whether large or small, the evacuation of ovarian cysts should be as complete as possible; and to secure the complete discharge of the fluid, whether in these cases or in ascites, he has long been in the habit of passing a gum elastic catheter through the canula, and constituting it a syphon. He also attaches importance to the prevention of the penetration of air during the tapping, and this he does by applying over the point to be punctured a glass cylinder having no bottom, and filled with water. Puncturing through this, some water may enter but no air; and to the same end, the extremity of the syphon may be placed in water. He also recommends two other precautions. 1st. The tumour should be most carefully percussed, the shades of dullness observed, and their limits traced with a pencil. In this way we soon get to know whether there are more than one cyst, and the positions and relations of these; and, especially, whether there is a noose of intestines lies between the tumour and the wall of the abdomen. Without this precaution the intestine, supported by the tumour, is very likely to be pierced through and through. In ascites this does not take place, for the intestine being mobile, and unsupported behind, the trocar does not traverse it. M. Piorry has tried numerous experiments upon the dead body, and has usually found, when adhesions have not been present, and the intestines have only been distended by air, even the sharpest trocar will rather push them before it than penetrate them. 2nd. The position given to the patient is of great importance. M. Piorry always punctures at the side, and, having completely emptied the cyst by means of the syphon, places the patient during the next twenty-four hours on the opposite side of the body. In this way no fluid can reach the peritonæum, and induce its inflammation.

M. Gimelle, although aware of exceptional instances of these tumours remaining stationary for twelve or twenty years, is an advocate for interference when the disease continues to make progress so as to threaten to reach that large size, which, after a greater or less number of punctures, always terminates fatally. The conditions justifying iodine injections, in his opinion, are:—1st. When the cysts present no abnormal changes of structure, being neither cartilaginous nor indurated, and giving no sensation of hard or schirrhous bodies within. 2nd. When its size does not exceed a diameter of ten or fifteen centimetres, or when it is larger after it has been first reduced in size by frequent preliminary tapplings; so that, in the event of inflammation occurring, it may be limited to as small a space as possible. He then throws in 30 drachms of tincture of iodine, diluted with 8 or 10 of water, leaves it in for some minutes while exerting gentle pressure on the abdomen, then evacuates as much as possible without employing compression, and leaves the patient in a state of absolute repose. He cites two cases, occurring in young women, in which this practice was successful.

Dr. Schnepf communicated to the Academy the results of Dr. Fock's experience in the iodine treatment, which he has employed in 15 cases. Of these, 9 were radically cured after from one to six injections. Of the 6 others, in two cases a cure followed keeping the wound open and repeated washing out with iodine injections; in 1, similarly treated, purulent infection followed. In 2 others, complicated with cancer, the iodine hastened the catastrophe, while in the last patient it exerted no effect.

M. Cruveilhier.—So parasitic is the life of ovarian cysts that they remain completely strangers to all the great vital and organic movements of the economy; so that while dropsies of serous membranes may be often advantageously treated by internal medicines, these encysted dropsies are quite refractory. It is to surgical treatment that we can alone look with any hopes of success, but our decision to have recourse to this should be materially influenced by the anatomical characters

of the cysts which are far from being always the same. The differences are dependent upon the quality of the fluid, the disposition of the cyst, and its structure. (1.) It is of great importance, as regards facility of evacuation, whether the fluid be serous, viscous, albuminous, or gelatiniform, and the character of the fluctuation will to a certain extent enable us to pronounce upon the nature of this fluid. (2.) The cysts may be either unilocular, multilocular, areolar, or vesicular, and compound, the latter resulting from an union of the other varieties. (3.) In structure the unilocular cyst sometimes exactly resembles a normal fibro-serous sac, its interior being as smooth as if lined with serous membrane; but it is by no means rare to find the inner surface rugous, or raised by papillæ or vegetations of varying hardness, or occasionally the walls may contain cartilaginous or even osseous plates. In one of the varieties of unilocular cysts there are numerous imperfect divisions, allowing of intercommunication between the compartments. In what M. Cruveilhier terms areolar cysts, of which the vesicular is but a variety, the ovary has become transformed into an areolar mass, having communications between its meshes, and filled with albuminous matter, varying in consistency from the white of egg to that of honey or jelly. The viscous nature of its contents explains the difficulty or impossibility of evacuating it after tapping. These cases may be regarded as absolutely incurable, not from their nature, which is not malignant, though they greatly resemble in appearance gelatiniform and areolar cancer, but owing to the viscous nature of their contents. Another incurable form is the multilocular cyst, having numerous and non-communicating cells, the contents of which are almost always albuminous. The unilocular ovarian cysts, which are alone amenable to palliative and curative treatment, are fortunately those oftenest met with. M. Cruveilhier approves of leaving them alone as long as possible, for tapping once commenced has to be repeated with increasing frequency until the patient's strength becomes exhausted. He has had no experience in the employment of iodine, but he regards the facts now known as sufficient to justify its recommendation. The rock on which it may split is the morbid structure of the walls of the cyst, and the ease with which the accidental fibrous or fibro-serous tissue of which it is composed suppurates, or even becomes gangrenous. M. Cruveilhier cites cases in which such results have followed simple puncture, independently of the production of peritonitis. Still such cases are rare, and in his large practice he has only met with three cases of death following simple puncture, the toleration of the operation seeming to increase with the frequency of its performance. In these cases, the cystic rather than the peritoneal inflammation which results may yield to active treatment, while there are even instances of definitive cure having resulted, owing to adhesive inflammation having been excited by the puncture.

(To be continued.)

FOREIGN CORRESPONDENCE.

FRANCE.

[From our Paris Correspondent.]

PARIS, February 20, 1857.

LAST week we have had no scientific events of great interest, but, however, I shall give you a report of some Medical facts which deserve to be known. First of all, the learned physiologist, Brown-Séquard, has written from America, where he is lecturing at this moment, an interesting letter to the Society of Biology, about the ablation of the supra-renal capsules. In a new series of experiments Dr. Brown-Séquard has found that the effects of the ablation of these capsules are not so serious as he had thought at first. He has seen that different animals can live several days after having been deprived of these organs. His conclusions are, that the loss of the capsules does not always correspond to the loss of their functions; that probably there are some other organs which can accomplish the same actions in a vicarious manner. He explains in that way the cases where animals have been seen restored to health after the operation. I think that such an explanation of physiological facts of great discrepancy must be borne in mind, first of all because it comes from a great

interpreter of the phenomena of life, and, moreover, because physiologists know that some organs, the spleen especially, can be destroyed without irremediable damage to health, although that organ is the seat of important changes in the composition of blood.

The Academy of Medicine heard last Tuesday the speech of J. Guérin upon the *subcutaneous method*. In one of the former meetings of the Society, Malgaigne had spoken with his usual eloquence on the history and the value of subcutaneous operations. He had tried to show that in the last century Monro and Hunter had recognised the influence of atmospheric air upon the process of repair of wounds after injuries; moreover, he had denied that this fluid was injurious to our economy. J. Guérin, in a less eloquent but more academical and philosophical oration, has looked at the question in its true light. He has explained the rights of Hunter and Monro, of Stromeier, Dieffenbach, and Delpech, to the discovery of subcutaneous operations; and he has demonstrated the value of these retrospective claims, which are always put forward to deprive the true inventor of the merit of a discovery.

The Academy has also listened to the explanations given by MM. Trousseau, Bousquet, Leblanc, and several others, about the communicability of grease to man, and the analogy of grease, cow-pox, vaccinia, variola. Leblanc, a learned veterinary surgeon, fellow of the Academy, does not believe in the communicability of grease, and he comments on a new example of infection from horse to man, to strengthen his opinion. Bousquet gives a contrary opinion: the observation quoted proves, says he, the contagion of the disease. He has, in fact, inoculated several children with the matter of the skin disease of the man infected, and has produced true vaccinia. Trousseau has spoken to the same purport. Grease is not always communicated to man, he has said, nor are variola and many contagious diseases caught in every case; it is sometimes impossible to inoculate variola, vaccinia, or grease to cows.

The *Révue des Deux Mondes*, one of our first literary and scientific reviews, has printed a paper of L. Baudens, the late inspector of the Medical service in the Crimea, upon the sanitary state of the French army in the last war. It is a curious, if not a very valuable and truly scientific work. Our military Physicians and Surgeons have written till now very little upon the late campaign. The Medical world listens, however, with the greatest attention to every notice upon this subject; and "The Report of a Medical Mission in the Crimea" will be read both by literary and Medical men. Perhaps the last may find that the scientific part of the essay of Dr. Baudens is not sufficiently full of positive data, and that his pathological explanations may be disputed. I do not speak of the literary merit of the composition; very few Medical men are good scholars among us, and Dr. Baudens has been too long with the army in the field to become a pure, correct, and classical writer. He appears to scorn every regular principle of written composition. He writes as he speaks and as he acts, like a soldier rather than like a literary man. It would be impossible to give an abstract of this pamphlet; so that I will rather explain, by some quotations, the style and the method of the clever inspector.

He speaks in succession of the food, of the encampment, of the clothes of the soldiers. We see that in the Crimean campaign the French army in the week ate four days biscuit and three days bread; that the meat was so bad that the soldiers had ten ounces for their daily allowance instead of eight. When there was a deficiency of oxen, preserved meat was allowed at the rate of four ounces for a man each day. Pulverised meat had always a bad taste, and was hardly tasted by the soldiers. There was a great want of fresh vegetables; preserved ones being more often insufficient. Dr. Baudens thinks that the invasion of scurvy was, if not prevented, at least delayed, by a plant very useful and quite common in the Crimea, the ordinary dandelion. The French army had no provision of sauerkraut, no lemon-juice. The wine was good; each soldier had an allowance of eight ounces of wine a day. Coffee was often given instead of wine and brandy (half an ounce of coffee and two-thirds of an ounce of sugar daily).

The English and Turkish soldiers were more careful than ours about corporal cleanliness. The army lived in huts, in conical tents, or in shelter-tents. It was dangerous to live in the huts except when it was possible to kindle a fire in them.

Shelter tents were insufficient during the winter. Conical tents would hold eighteen men. The great cloak, called Crimean, has been very useful, says Baudens.

Such are the principal bearings of that composition. So few observations have been published since the end of the war about the sanitary state of the troops, about the causes of its diseases, that I have thought it interesting to record the data given by a man who took charge of the health of an army of 140,000 men. Imperfect and unfinished as they are, these observations will tell to sagacious minds what was the true condition of sanitary matters during the last war.

GENERAL CORRESPONDENCE.

KREUZNACH WATER.

[To the Editor of the Medical Times and Gazette.]

SIR,—Observing under the head of "Hospital Notes" in the last number of the *Medical Times and Gazette*, some remarks upon the supposed possibility of promoting the absorption of isolated fibrous tumours of the uterus by the use of certain remedies, among them the Kreuznach Waters, which contain large proportions of iodine and bromine in combination with other bases, I am induced to state that during the summer of 1854 I visited Kreuznach for the express purpose of obtaining information respecting the influence of those agents in these and in similar hypertrophies; a question in which I am, and have long been, much interested, especially as bearing on the treatment of prostatic enlargement. I was unhesitatingly assured by Dr. Oscar Prieger, in answer to my inquiries, that he had no reason to believe that the Kreuznach Waters, whether employed on the spot or elsewhere, exercised the power of removing undoubted fibrous tumour; although his constant experience gave him great confidence in their efficacy in diminishing general hypertrophies of the uterus, that is, those not affecting an isolated form or independent growth. This statement may perhaps be deemed of some interest in connexion with the recorded opinions of Drs. West and Oldham, with which it so completely harmonises; and it is especially apposite to the subject as coming from Dr. Prieger, who, while kindly affording me opportunities of acquiring information, was far from making for the "brunnen" of the district any of those comprehensive claims to the possession of extraordinary therapeutic power, which are sometimes met with in connexion with mineral springs.

I am, &c.

HENRY THOMPSON.

Wimpole-street, February 23, 1857.

THE RECTANGULAR OPERATION FOR LITHOTOMY.

[To the Editor of the Medical Times and Gazette.]

SIR,—My attention has been directed to a statement made by Mr. Gamgee, at a meeting of the Royal Medical and Chirurgical Society of London, held on the 10th inst., and published in your last number, that in an operation for stone which he had seen me perform with the rectangular staff, the rectum had been wounded. I beg to say in reply that, if the report contained in your Journal be correct, the only explanation that can be given of Mr. Gamgee's statement, is that the scene he describes must have been a dream. No such accident as wounding the rectum ever happened to any patient so operated on by me. Neither, although the operation has been performed in Glasgow, in and out of the Hospital, almost exclusively during the last ten years, did I ever hear of any such accident having occurred. One of the great advantages indeed of the operation is that the rectum is quite secure from being wounded. The curved form of staff in the ordinary operation, and the holding it up against the pubes, are the great causes of wounding the rectum.

I may also take this opportunity of saying that I have never experienced any difficulty from the angle of the staff slipping, although the mode of holding the staff is one of the most important points of the operation. But I may observe, and this Mr. Spencer Wells seems to have overlooked, that I retain my finger in the rectum during its performance.

Mr. Hutchinson observed that a rectangular instrument makes an inconvenient sound. Now so far is this from being the case that I prefer that form of sound to all others, and find it to be the best for detecting many stones, particularly

those of minute size. As to Mr. Hutchinson's ingenious "catheter staff," I have no doubt that in many cases it may be found a valuable instrument.—I am, &c.

ANDREW BUCHANAN.

4, Atholl Place, Glasgow, Feb. 25.

[Dr. Buchanan will see that Mr. Gamgee has written to correct the report of his speech, but our reporter was not to blame, as there were members present who also understood Mr. Gamgee to make the statement as given in our report.—Ed.]

PYÆMIA.

[To the Editor of the Medical Times and Gazette.]

SIR,—I owe an apology to Mr. Allen for having overlooked his letters in your number of the 7th ult. In reply, I beg to state that I published the statistics to which he refers, although aware of their incompleteness, in order to elucidate (as far as my materials allowed) not the general pathology of pyæmia, but merely the question, whether it had followed operations more frequently since the latter had been performed under chloroform. This being the case I did not introduce the question of the mortality after pyæmia, but only alleged such cases as had been verified by post-mortem examination. With respect to recoveries I can only remember two in which the symptoms were so distinct as to leave no doubt upon the minds of any of those in attendance on the case of the presence of pyæmia. One was after an operation (amputation of the forearm), the other after compound fracture. The treatment was not thought to have had any effect on the disease.

I agree with Mr. Allen that many cases in which pyæmia is threatened do well under judicious treatment; but am not inclined to class these as cases of pyæmia cured, without some more distinct evidence of the actual existence of this state of the system. The fact is, that our knowledge of pyæmia in its early stage is not yet sufficient to enable us to diagnose it with certainty before it has arrived at a state from which recovery is exceedingly rare.

I am, &c.

4, Vigo-street, February 16, 1847.

T. HOLMES.

POOR-LAW UNION SURGEONS.

[To the Editor of the Medical Times and Gazette.]

SIR,—Allow an old member of the Profession, through the medium of your valuable Journal, to address a few lines to Union Surgeons.

Allow me to remind you, gentlemen, that it will be your own fault if the numerous petitions of Union Surgeons are allowed "to lie on the table" of the House of Commons; for the time has now arrived when, by active co-operation on your part, the public will be made to feel the neglect and injustice to which you have so long been exposed. Even members of Parliament themselves are astonished at the position of the Union Surgeons, but it is useless to expect any redress from the Poor-law Board or the Boards of Guardians; for those bodies thoroughly appreciate their position of superiority, and calculate upon our want of unanimity as the excuse for their oppressive conduct. If, therefore, you desire success you must be up and stirring, and do not delude yourselves with the hope that the Poor-law Board will do anything for you; it will only tell you, in reply to your numerous memorials, that "they shall receive attention," or, that the matters to which you refer "are not immediately under its control," &c. Notwithstanding the evasive conduct of this Board, I need not tell you that it possesses almost unlimited powers in all matters relating to the relief of the poor, and is perfectly competent to deal justly with the Poor-law Medical officers, if it thinks proper to make the effort.

Now I will tell you what course to pursue. Never cease to agitate in the House of Commons until some redress is obtained. Let every Union have a Sub-Committee, and communicate with the Central Committee in London. I particularly recommend you to discuss the subject of Poor-law Medical relief with the members of Parliament in your immediate neighbourhood, and let them plainly understand that unless they will aid the cause of Union Medical Officers in obtaining some ordinary measure of justice, you will not only vote but canvass against them at the next general election.

I would, in addition, suggest the propriety as well as the expediency of applying to some of the leading newspapers for their co-operation, as also to the Administrative Reform Association in London. This latter Society has done much towards remedying abuses, and it is supported by many of the ablest men in the kingdom. I feel assured that the Association would, on principle, lend a helping hand to the Poor-law Medical Officers, if their grievances were fully made known.

As a matter of course, expenses must arise, and I advise you, one and all, to aid the exertions of Mr. Griffin and the Committee by subscribing at once a sovereign to the fund of the Poor-law Medical Reform Association. You can surely afford this sum, and it will give to the cause the sinews of war, and show the Poor-law Board and the Guardians that we are determined to continue the struggle in the interests of justice and humanity.

In conclusion, I would advise you to treat the Poor-Law Board with silent contempt, but to petition the House of Commons. If in this Session you get no redress, I should then advise you to tender your resignations in a body. Let us all be firm and united, feeling that we are acting upon a high moral principle, and you may be assured that justice must sooner or later be rendered.

F.R.C.S.E.

COMPRESSION TREATMENT IN ANEURISM.

[To the Editor of the Medical Times and Gazette.]

SIR.—The excellent paper, read at the first meeting of the Army Medical and Surgical Society, on the treatment of Aneurisms, fully proves that the majority of those existing in the popliteal space can be cured, "tute et jucunde," by pressure alone. But is that treatment equally successful for aneurisms in other situations? Experience will alone solve the problem. In last Saturday's *Medical Times and Gazette* three cases of unsuccessful treatment by compression are recorded by your Medical reporter, and in which, consequently, the ligature was obliged to be had recourse to.

Will you permit me to add my mite of experience, as I am an admirer, and advocate of Dr. Bellingham's discovery.

In 1850, while I was House-Surgeon of the Taunton and Somerset Hospital, two patients labouring under this disease were admitted under Mr. Alford. I regret I have no notes; but this all-important termination of the cases is sufficiently impressed on my memory to enable me to speak with accuracy.

A boy, aged 16, had a true aneurism of the femoral, immediately below Poupart's ligament, of the size of a bantam's egg. The artery was compressed against the os pubis by a common elamp tourniquet; but the force used was never allowed to be sufficient to stop the circulation; and the control of the instrument was quite at the disposal of the patient. The skin, consequently, was never abraded, and we had the pleasure of seeing the sac quickly solidified. This favourable result may, no doubt, be partly ascribed to the fact that the circulation was weak, as extensive valvular disease of the heart co-existed; but it is a proof that the treatment by compression is applicable in just such cases as we should be very chary of using the ligature for. The other case was one of false aneurism of the femoral, immediately above the aperture in the adductor magnus. The patient was a strong young man, who had spiked himself in getting over a style. Signoroni's circular apparatus with two pads was applied; but we were obliged to discontinue it, and to tie the artery in Scarpa's triangle, as the skin ulcerated, and the pain was excessive. That the pressure had exercised a beneficial effect in opening up the collateral circulation, was proved by the return of the "bruit" in the aneurismal sac very shortly after the application of the ligature; and the impression left on my mind is, that the treatment by compression would have been successful had the force been less, and placed under the control of the patient.

I am, &c. W. T. GAGE, M.B.

Williton, Taunton, February 9, 1857.

RE-OPENING OF THE SCHOOL OF MEDICINE AT CAIRO.—This event occurred recently under the presidency of Ethem-Pacha, the great encourager of public education in Egypt. Clot-Bey, who organized the first school thirty years since, and is now its restorer, read the opening discourse in French, which was translated by one of the professors into Arabic.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, February 16.

Dr. WATSON, President, in the Chair.

After some preliminary business

Dr. BRISTOWE read for Mr. HUTCHINSON and himself a report of Mr. Nunn's specimen of what had been considered to be a

FIBROUS TUMOUR OF THE OVARY.

In this case a tumour, the size of a child's head, had been removed from the abdomen of an old woman, of whose disease there was no history. Externally it showed a layer of yellow-white calcified material, nearly an inch thick, and in parts bony; within, the structure was plainly fibrous, and had no cretaceous or osseous deposits. The tumour was attached to the uterus by a band about the length and thickness of a broad ligament, it possessed also bands of adhesion to the omentum and adjacent viscera. Attached to the uterus by a short pedicle, and growing from its opposite side, was a nodulated white fibrous tumour, of the ordinary kind, about the nature of which there was no doubt. Only one ovary was present. Mr. Nunn believed the larger tumour to represent the missing ovary, and to determine this point it had been referred to the Committee. Dr. Bristowe reported that after careful examination they had come to the opinion that it was not an ovarian but a pedunculated fibrous tumour of the uterus. This conclusion they based on the following facts: 1st, That the ovary present evidently belonged to the same side as the tumour, although it was not connected with it. 2nd, That the structure of the tumour showed under the microscope the unstriped muscular fibre of the uterus. 3d, That the body of the uterus was almost wholly wanting, only the cervix being present, whilst its fundus was puckered and had evidently undergone great loss of substance. 4th, That the calcification of a peripheral layer, although acknowledged to be very rare in uterine tumours, did occur sometimes, as was proved by existing specimens. The Committee thought it probable that the missing ovary had been accidentally cut away in the removal.

Mr. HUTCHINSON remarked on the general subject of pedunculated uterine tumours, that he thought that the peripheral calcification might possibly be explained as resulting from the disintegration of a layer of uterine tissue by which the tumour had been surrounded. At first, from this condition, he had been inclined to doubt the tumour being uterine; but on search, he had found in the Museum of St. Bartholomew's a parallel specimen. In the latter case, the tumour was also partially pedunculated. He had searched through the museums of the College of Surgeons, of St. Bartholomew's, and of Guy's Hospitals, but had been able to find but one example of this peripheral calcification, whilst the occurrence of scattered osseous and calcareous deposits was illustrated by a great number of specimens.

Mr. NUNN objected to the report of the Committee, with which he could not agree. He still believed the tumour ovarian, and hoped a second Committee might be appointed.

Dr. BRISTOWE and Mr. HUTCHINSON expressed their desire that the subject should be further investigated if Mr. Nunn wished, but stated that they did not feel any reasonable doubt. After some conversation, the President nominated Dr. West and Dr. Bristowe to make a second report.

Mr. HULKE next brought before the Society a specimen of ENCEPHALOID CANCER OF THE EYEBALL.

This patient was a child of about 4 years old. The development of the growth had been watched for several months. The history of the case presented nothing peculiar; there was the usual bright reflex from the bottom of the eye, and numerous blood-vessels were seen ramifying upon it. The eye had become inflamed, and had been removed by Mr. Bowman. The situation of the vitreous humour was filled with a soft, brain-like growth, which was abundantly vascular, and presented the minute structure of encephaloid cancer. The choroid and ciliary muscles were much thickened by inflammatory exudation.

Mr. HULKE also showed a specimen of

MELANOSIS OF EYEBALL.

The eye had been disorganized by violent inflammation twenty years before. Two months before his admission into King's College Hospital the conjunctiva became red, and two small tubercles appeared on the front of the globe—these burst, and bloody serum escaped. Soon afterwards a tumour shot out from the front of the eye, rapidly attained considerable size, and projected between the lids. Its colour was dark, and its surface, from which there was a constant sanious oozing, was irregular. The projecting mass moved readily in association with the movements of the other eye. After removal by Mr. Bowman, the growth was found to consist of two parts, a dark blackish, and a light grey portion. Excepting that the cells of the dark part contained pigment, the minute structures of both portions were similar. The shrunken globe was filled with the cancerous growth which had escaped in front, forming the external tumours, and the sclerotic had given way behind the insertion of the tendon of the inner rectus muscle, and also near the entrance of the optic nerve; and in these situations there were small nodules of the tumour outside the globe, continuous with the mass filling its interior. It is interesting to notice at how late a period in the history of the case melanosis has been developed. It appears also that the free mobility of the tumour was not a sure sign of the sclerotic coat being entire posteriorly.

Dr. WILKS showed a preparation illustrating

DISEASE OF THE HEART WITHOUT VALVULAR AFFECTION.

This specimen was from a woman who had been under Dr. Barlow's care in Guy's Hospital, for heart disease. She died with all the usual symptoms of cardiac derangement, as dropsy, &c. She was 30 years of age, and had not been well since an attack of acute rheumatism 18 years before. The heart was remarkable, as exemplifying the effects of general carditis, independent of disease of the valves. The serous membrane, both without and within the heart, was much thickened, indicative of the inflammation which had once existed, and at the same time the muscular structure itself was pervaded throughout by a number of white streaks, producing what is known as the fibrous degeneration. The endocarditis had been most intense towards the apex rather than the base of the ventricle, and thus probably the absence of valvular affection, and the existence of the present form of malady. The whole organ weighed 24 ounces. The left ventricle was much dilated.

Mr. SIBLEY brought before the Society

SPECIMENS OF NEUROMA.

The first specimen was removed by Mr. Nunn, from the arm of a female aged 20, where it had been growing for twelve months, but had given rise to very little pain. The tumour grew from the musculo-spiral nerve, and a portion of this structure was removed along with the new growth. When first excised the tumour was about the size of a large walnut, and was enveloped in a dense fibrous capsule continuous with the sheath of the nerve. On removing the capsule the neuroma was found to involve only a portion of the whole nerve. Many nerve fibres were traced to a considerable distance within the tumour, others were observed coming from it. Under the microscope the structure was made up of connective tissue, principally of the white wavy fibres. A very abundant supply of capillary vessels was also noticed, arranged in a network throughout the tumour.

The second specimen had grown in connexion with the fifth and sixth cervical nerves. It was removed some time since by Mr. Barber, of Stamford, from the neck of a female, aged 40. The tumour had caused extreme pain, and great cutaneous sensibility over the right side of the neck, which chloroform and other topical remedies failed to relieve. After excision the tumour was found to involve a considerable portion of the fifth and sixth cervical nerves; it was inclosed in a dense fibrous capsule. On section the interior of the growth was observed to be softened and broken down. The microscopical structure was similar to that of the first specimen.

Mr. SIBLEY also showed

VILLOUS GROWTH ON THE DURA-MATER.

This specimen was a growth the size of a small nut, which

sprung from the dura-mater near the face. There was a depression on the surface of the brain opposite the tumour, but no disease of the substance of the brain. The patient from whom it was removed had died in the Middlesex Hospital, under the care of Mr. Shaw, with cancer of the uterus. There were no symptoms connected with the growth observed during life, nor was there any secondary cancerous growth noticed after death. In structure the growth was composed of a number of little villi. In addition to the epithelial cells usually found in these growths, there were several "laminated" and "brood" cells.

Dr. QUAIN presented for Dr. BALMAN, of Torquay, the lungs and heart of a child, whose death was apparently caused by a

METASTASIS OF SUPPURATION.

The subject of these specimens was a stout boy, three years old, who came under Dr. Balman's notice for an abscess situated in the neck, about $1\frac{1}{2}$ inch from the angle of the left jaw, a little anterior to the sterno-mastoid muscle. Opened, it gave exit to a considerable quantity of healthy pus. A counter-opening was required on the third day. On the 10th day the child was well. On the day following he had some shortness of breathing, which continued for three or four days, the attacks being described by the friends as resembling asthma. He had also some difficulty in swallowing liquids, but not solids. In fact, he eat bread and butter for his breakfast a few hours before his death. This occurred so suddenly, that Dr. Balman, who had not seen the child during three days, on coming immediately that he was sent for, found him dead. A post-mortem examination showed the sac of the abscess still existing, the lining being of a dirty-brownish aspect, but containing no matter, and having no communication with any organ. The œsophagus and the larynx were found perfectly healthy; when the trachea was laid open, a thick coating of puriform matter was seen extending downwards as far as the division of the bronchi, where there was rather a greater accumulation. The left bronchus, as far as it could be followed through its ramifications, was filled with the same creamy-looking matter. The right bronchus presented no such appearances, and the lung tissue appeared alike healthy on both sides, except the oozing of matter from the small bronchi of the left sides. There were no coagula in either the pulmonary arteries or veins. The heart was healthy, save that there were but two (still efficient) aortic valves. Dr. Balman remarks, that the interest of the case centred in the connexion which manifestly existed between the healing of the abscess in the neck and the presence of a quantity of purulent matter in the air-tubes of the lungs. This matter, which appeared to be independent of true inflammatory action (and which, in reply to a question, was said not at all to resemble coagulable lymph), was manifestly the cause of the child's death, by producing suffocative spasm. Dr. Quain added, that Dr. Balman's details of the case were so full and satisfactory, that no doubt concerning them could exist.

WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON.

FEBRUARY 6, 1857.

Dr. SEATON, V.P., in the chair.

THE sixth annual meeting was held this evening.

Mr. HATFIELD related a case of

POISONING BY THE ROOT OF ACONITE.

He was called at eleven o'clock a.m., of the 9th of November, 1856, to a man, 64 years of age, whom he found stretched on the bed, with his face downwards, groaning, and complaining of agonizing burning pain at the epigastrium, parched mouth, intense thirst, constant retching. The pulse was imperceptible, the skin cold though perspiring, and the countenance expressive of extreme agony. Jactitation incessant, scarcely remaining half a minute in the same position. His wife stated that he was seized with "deadly sickness," and faintness, with pain in the stomach, about half-past eight o'clock that morning; that she, by his request, had procured from a neighbouring druggist an emetic, (afterwards found to consist

of ipeacacuanha,) at half-past nine o'clock, which had produced vomiting, but no relief to the symptoms. Upon further inquiry, the man himself stated that he had taken some monkshood root during the absence of his wife, about eight o'clock in the morning. It could not be ascertained from him, however, whether he took it intentionally or by mistake, as he intimated that he took it from his tobacco-box; none was found there afterwards. An emetic of sulphate of zinc was administered, which produced copious vomiting of a fluid resembling gravy soup, with a large quantity of tenacious mucus; but no portions of the poisonous root. Brandy and water and strong coffee were also given, but he died at half-past eleven o'clock without convulsion, and retaining his consciousness to the last. Autopsy, 32 hours after death: Body was short and muscular; rigor mortis strongly marked; the gastroenemic muscles were contracted into a ball, as occurs in cramp, but no clenching of the hands or distortion of the features were present. The pupils also were of a natural size. Upon incising the scalp, fluid blood exuded in large quantity from the occipital region. The calvarium was thin, and a considerable quantity of fluid blood and serous fluid escaped previous to the removal of the brain. The arachnoid membrane at the superior surface was very dense and opaque, and enclosed a large quantity of serum; the pia mater gorged with fluid blood. Upon slicing the cerebrum, even in the gentlest manner, bloody serum oozed out in large quantities from the sulci between the convolutions; and numerous bloody points appeared on the cut surfaces. The ventricles did not contain much fluid, and the cerebral substance was healthy throughout. The lungs and pleuræ were perfectly healthy. Heart flaccid, but healthy in structure; the right side containing blood very slightly coagulated. The left side was empty. The liver was healthy; gall-bladder full. The stomach contained a considerable quantity of food, half digested, together with four large masses of beef, nearly the size of a man's thumb, which appeared to have been swallowed whole, and were entirely undigested. There were also four transverse slices of monkshood root in an unaltered state. The mucous membrane exhibited a slight reddish brown patch of colour, of the size of half-a-crown, at the cardiac extremity, but was perfectly sound in texture and healthy in appearance elsewhere. The other abdominal organs were in a normal state. In consequence of the late period of the case at which Mr. H. was called in, only half an hour before death, he had not an opportunity of observing the earlier symptoms; but so far as they were observed, the features of the case appeared to resemble closely those recorded by other authors in cases of aconite poisoning.

Mr. BARNES communicated a case of

FIBROUS TUMOUR OF THE OS UTERI.

It occurred in a lady, aged 35 years, unmarried, who, until the last two years, had enjoyed good health. Within that time irregularities of menstruation had occurred, in respect of time, quantity, and duration; often recurring suddenly, and in large quantity, accompanied with pain. An examination of some difficulty revealed the cause of these symptoms, in a tumour completely filling the vagina, and springing by a pedicle from the lips of the os uteri. Dr. Locock having confirmed this by examination, proceeded at once to its removal, which was accomplished by drawing the tumour well down with a pair of hooked forceps, and snipping the pedicle through with curved scissors, by a series of small cuts. A good deal of hæmorrhage followed, but was stopped by plugging. The pedicle was of a cartilaginous character. Mr. Barnes stated that six of these cases had occurred to him during his residence in this neighbourhood, two of which were removed by ligature; four by excision; and his experience inclined him to an opinion favourable to this latter mode of removal.

Mr. DICKINSON mentioned a case of

COMPOUND DISLOCATION OF THE THUMB,

which had been put up in the usual way when Mr. D. first saw the patient. He was then, seven days after the accident, suffering with trismus, of which he speedily died. Mr. Dickinson took occasion to remark, that the opinion of Abernethy, given many years ago, appeared to him to be sound; viz., that amputation should at once be performed in all cases of this accident.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF LORDS,—THURSDAY, FEB. 26.

PUBLIC HEALTH SUPPLEMENTAL BILL (1857.)

On the motion of Earl GRANVILLE, this bill was read a second time.

HOUSE OF COMMONS.—THURSDAY, FEB. 19.

MEDICAL REFORM.—Mr. HEADLAM obtained leave to bring in a Bill to amend the laws relating to the Medical Profession.

MONDAY, FEB. 23.

The Public Health Supplement (1857) Bill was read a third time and passed.

TUESDAY, FEB. 24.

SANITARY REFORM.—Mr. COWPER said he proposed to bring forward the Health of Towns Bill on the 5th of March next.

THE FRANKLIN EXPEDITION.—On a motion for papers, Sir C. Wood declined, on the part of the Government, to take the responsibility of risking the lives of gallant men in a hopeless enterprise. He believed that there was no chance of saving life, and that the probability of discovering journals or records was very remote.

THURSDAY, FEB. 26.

DISEASE AMONGST CATTLE.—In answer to Mr. STAFFORD, Mr. LOWE said the attention of the government had been called to this subject. The Board of Trade had put themselves in communication with the Board of Customs, who possessed the power to prevent the importation of infected cattle. To show that the Customs had not been negligent, he had received a communication from a member of the Board of Customs, stating that an animal which had been suspected of being infected was examined and ultimately killed.

Mr. BAILLIE inquired whether it was the intention of the Board of Trade to disallow the importation of cattle from the infected districts.

Mr. LOWE said that power was vested in the Customs.

Mr. STAFFORD gave notice that he should call the attention of the House to the subject the next day (Friday).

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 20th inst. :—

DENNE, THOMAS, Tonge, Sittingbourne, Kent.

DYER, GEORGE HENRY, Royal Navy.

FORBES, WILLIAM, Aberdeen.

JONES, CHARLES MARCHANT, Beyrout, Syria.

LAMB, ROBERT, Sutherland-square, Walworth.

LAVER, HENRY, Paglesham, Essex.

TOLLER, EBENEZER, H.E.I.C.S.

TUCKER, OWEN, Army.

WOOD, WILLIAM, Middleton, Beverley, Yorkshire.

At the same meeting of the Court, Mr. ARCHIBALD LESLIE ARCHER passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the Edinburgh College of Surgeons, his diploma bearing date the 4th of July, 1849.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, February 19.

BLEASE, THOMAS TORKINGTON, Altrincham.

COOPER, ASTLEY, Plymouth, Devon.

GREENWOOD, JAMES, Queen's-road, Dalston.

GULL, FREDERICK, Stanway, Essex.

HUTCHISON, GEORGE SMITH, Norwich.

KENDRICK, PHINEAS J., Goldthorn-hill, Wolverhampton.

DEATHS.

O'CONNOR.—Feb. 13, at Widecombe Crescent, Bath, James O'Connor, Esq., M.D., aged 87.

ORTON.—Feb. 15, at Oxford Parade, Cheltenham, James Orton, Esq., formerly President of the Medical Board, Bombay Establishment.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—The Annual Dinner of this Society was held on Saturday, the 21st inst., at the Freemasons' Tavern, under the Presidency of John Nussey, Esq., V.P., in the absence of Sir Charles M. Clarke, Bart., M.D., the President, whose state of health prevented his attending. Mr. Nussey made some very appropriate remarks upon the paucity of members of this Maturely Aged Society—the best conducted of all, in the words of Mr. Tidd Pratt; and drew attention to the "Short Account of the Society," circulated within a few days to all the members of the Profession eligible for election into it, who he trusted would now flock in abundantly, and enable the Society to prevent the ever-recurring cases of destitution, which at present can receive no benefit from its funds. Mr. Walne, one of the Vice-Presidents, observed that many practitioners, when spoken to about the Society, denied all knowledge of it; and when assured that they had several times received notices of it, supposed that they had not been read because they were printed. Personal information on the subject he had constantly found to beget an interest in the Society, and to be followed by an application for election as a member. Dr. Merriman, the Secretary, drew attention to the fact, that very recently two or three children had from their very birth been recipients of the Society's grants, their birth having occurred either just previously, or just subsequently to the decease of the father. Dr. John Clarke, Acting Treasurer, announced donations to the extent of £230, including £50 from the Earl of Yarborough, and another £50 from the widow of a late member. We are requested to draw attention to two errors in the "Short Account" referred to above, viz. the omission of Mr. Bacon as a *Vice-President*, to which he was elected in 1845; and a statement in the total amount of Grants for Relief, which should be printed £51,087 19s. in the 65 years.

SOLVENT PROPERTIES OF GLYCERINE.—Advantage is being taken of the solvent and preservative properties of glycerine, in the preparation of medicines, both for internal and external use, and of various essences for culinary purposes. Glycerine approaches very nearly to diluted alcohol in its solvent power. It is supposed to possess the same power of supporting nutrition as cod liver oil, and to be more easily digested in many cases. This however requires the confirmation of experience. Many specimens have been sent us of medicines prepared with it, such as iodide of iron, quinine, iodide of quinine, carbonate of iron, iodine, tannin, perphosphate of iron, &c. The culinary preparations are essence of cloves, essence of cinnamon, lemon juice, lemon flavouring, &c. The flavour is well preserved. It is extremely probable that in many cases glycerine will supersede alcohol as a solvent and preservative.

ACTION OF SUGAR ON THE TEETH.—M. Larez, in a course of investigations, arrived at the following conclusions relative to the action of sugar upon the teeth:—1. Refined sugar, from either cane or beet, is injurious to healthy teeth, either by immediate contact with these organs, or by the gas developed while it is in the stomach. 2. If a tooth be macerated in a saturated solution of sugar, it is so much altered in its chemical composition that it becomes gelatinous, and its enamel opaque, spongy, and easily broken. 3. This modification is due, not to free acid, but to a tendency of sugar to combine with the calcareous basis of the tooth.

THE GREAT PRIZE FOR DISCOVERIES IN THE APPLICATIONS OF GALVANISM.—By a decree, dated February 23, 1852, the French Government established a prize of 50,000 francs, to be decreed to the author of the discovery which will render the Voltaic Pile economically applicable as a source of heat or light, to chemistry, to mechanics, or to practical medicine. The prize was to remain open for five years, when a Commission was to be appointed to consider the claims of the different candidates. By another decree, dated February, 1857, the following Commission has been appointed for this purpose, nearly all the members being members of the Institute; MM. Dumas, Chevreul, Pelouze, Regnault, Despretz, Rayer, Serres; Barons Dupin and Seguier; Generals Poncelet and Morin; and MM. Reynaud and Sainte-Claire Deville, the last-named officiating as Secretary.

THE CHOLERA IN INDIA.—The neighbourhood of the powder works at Mazagon has just sustained one of those frightful visitations of cholera which periodically startle us by their suddenness and violence. The plague broke out on the

night of the 28th ultimo, in a house in Powder Works-street, and three corpses were carried out of it in the morning. Some idea of its violence may be conceived from the fact that, out of a population of 1300 people who lived in this street, ninety were destroyed within ten days. The whole of the inhabitants have been removed into tents, and the most energetic measures have been taken by the superintendent of police to check the progress of the disease by sanitary measures.

CHOLERA.—From Demerara, by the last advices, we learn that since the departure of the previous mail, the cholera had spread over nearly the whole colony. The total number of deaths reported in Georgetown, from the commencement of the epidemic until 6 o'clock on the morning of the 24th of January, was 142.

MORTALITY NOTABILIA.—The total number of deaths registered in London in the week that ended on Saturday was 1243. In the first week of this month the deaths rose to 1368; with a warmer temperature during the succeeding two weeks, they have been on the decline. In the ten years 1847-56 the average number of deaths in the weeks corresponding with last week was 1211; but allowing for the increase of population, they would be 1332. The result of the comparison is favourable as regards the present state of the public health. In the three weeks of February the mean weekly temperature was consecutively 32.3°, 40.9°, and 42.5°. In the same periods the deaths caused by diseases of the respiratory organs (exclusive of phthisis) were 359, 307, and 288.

BIRTHS.—The birth of 975 boys and 904 girls, 1879 children, were registered.

THE following are the number of Deaths from Small-pox, Measles, Searlatina, Hooping-cough, Diarrhoea, and Typhus, in the several Districts of London, for the past Week:—

	Popula- tion.	Small- pox.	Measles.	Scar- latina	Hoop- ing- Cough.	Dia- rrhoea.	Ty- phus.
West.....	376,427	2	6	2	11	1	5
North	490,396	1	12	3	10	5	11
Central ..	393,256	1	8	..	14	4	7
East.....	485,522	..	5	11	20	4	14
South	616,635	..	4	7	19	4	7
Total..	2,362,236	4	35	23	74	18	44

DEATHS REGISTERED in the Metropolis for the Week ending Saturday, February 21, 1857.

CAUSES OF DEATH.	In the Week ending Saturday, Feb. 21, 1857.						Averages of Temperature and Deaths in 10 Weeks.
	Deaths of Persons.						
	AT ALL AGES. Mean temp. 42.5	Under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.	At 80 Years of Age and Upwards.	
Mean Temperature	42.5						39.7
ALL CAUSES	1243	563	151	236	230	37	1211.3
SPECIFIED CAUSES	1218	566	151	234	230	37	1207.0
DISEASES:—							
1. Zymotic Class	234	188	14	21	8	3	233.6
2. Dropsy, Cancer, and others of uncertain seat	43	5	1	20	14	3	53.2
3. Tubercular Class	193	77	63	45	8	..	202.0
4. Of Brain, Nerves, etc. ..	137	74	12	20	26	5	133.6
5. Of Heart, etc.	58	6	9	21	20	2	53.1
6. Of Respiratory Organs ..	288	115	26	61	78	8	267.2
7. Of Digestive Organs ..	67	30	7	14	15	1	58.7
8. Of Kidneys, etc.	19	2	2	8	7	..	13.9
9. Of Uterus; viz. — Puer- peral Disease, etc.	6	..	5	1	..	..	7.7
10. Of Joints, Bones; viz.— Rheumatism, etc.	7	2	..	4	1	..	9.3
11. Of Skin, etc.	3	1	..	1	1	..	2.2
12. Malformations	3	3	..	..	..	..	4.8
13. Debility from Premature Birth, etc.	25	25	..	..	..	..	26.7
14. Atrophy	18	10	..	1	7	..	27.1
15. Age	46	..	..	..	31	15	60.2
16. Sudden	6	3	2	..	1	..	11.4
17. Violence, Privation, etc. ..	65	25	10	17	13	..	42.3
CAUSES NOT SPECIFIED.. ..	25	2	..	2	..	..	4.3

ORIGINAL LECTURES.

CLINICAL LECTURES

ON

DISEASES OF THE SKIN.

ILLUSTRATED BY COLOURED ENGRAVINGS.

By WM. JENNER, M.D.

Physician to University College Hospital, the Hospital for Sick Children, etc.

LECTURE III.

URTICARIA.

In regard of its pathology and etiology, Urticaria, or nettle-rash, is so very closely related to Erythema fugax that we pass naturally from the genus Erythema to Urticaria. Yet Urticaria is not correctly placed among the Exanthemata. In Urticaria there is something more than redness disappearing or fading on pressure; there are wheals, or pomphi, as they have been called.

Wheals are flat elevated patches of the skin. The sting of a nettle, the bite of a bug, the stroke of a whip are each followed by a wheal. Wheals differ much in form, size, and colour. In form they may be circular, oval, or irregular; in size they vary from two lines to some inches in length; in colour, from almost white to deep purple.

In Urticaria each wheal is seated on a red patch; sometimes the patch is very large, the wheals small; sometimes the redness forms merely a narrow halo around the wheal; several wheals may be seated on the same red patch. Wheals frequently appear and disappear again with singular rapidity. Now and then the red patches remain for a while after the wheals have vanished; in some cases the red patch precedes the eruption of the wheal, in others the wheal comes out first; while in others, again, they appear simultaneously. When the red patch only is present, you may very readily confound the disease with Erythema; a little friction of the part, however, will prevent the mistake by bringing out the wheal. Now and then the surface covered by the redness is very considerable in extent, and then the wheals not being present, you might possibly take the case for Scarlatina. After my last lecture, you may remember a child was sent (in order that I might show it to you), into this room, supposed by one of the physician's clerks to be suffering from Scarlatina. The scarlet rash was limited to the upper extremities. I detected on the red parts one or two wheals imperfectly evolved; and, before the child left the room, a very considerable number of well-marked wheals appeared.

The patients often mistake the pale elevations of the cutis for blebs, and then they tell you that large blisters occasionally come out over them. Whenever you are told this, and there are no scabs present, you should at once think of Urticaria as the probable disease. The wheals in Urticaria itch, tingle and burn. These sensations are often almost intolerable. Usually they are aggravated at night when the patient is warm in bed, when seated by a fire, and by the use of stimulating articles of diet. Now and then, however, the wheals and the itching, tingling, and burning sensations are only present when the patient is exposed to cold. Any change of temperature suffices in some cases to determine the evolution of the wheals. The structure of the wheals in Urticaria has not been very clearly made out. The redness is, of course, caused by repletion of the vessels of the cutis, but to what is the elevation and pallor of the wheals due? Gustav Simon says that if a needle be passed into the cutis constituting a pale wheal, a little clear serosity only escapes, and he concludes from this that the swelling is occasioned by the presence of serosity in the substance of the cutis. The pallor is attributed to the quantity of serosity effused being out of proportion to the number of vessels loaded with blood. The sudden appearance and disappearance of the wheals seems, however, to be opposed to these ideas.

Urticaria is a very common disease. It occurs at all ages. Persons prone to rheumatism are said to be especially liable to Urticaria. I mentioned the same in regard of Erythema.

Varieties of Urticaria.—Local Urticaria results from the application to the skin of certain irritants, *e. g.* a blow, a sting, &c. The only cases of Urticaria, however, we are called on to treat are those in which the disease is due to constitutional states. A most acute and severe form of Urticaria is not unfrequently the result of a single error in diet.

In some persons shell-fish, in others pork, in others pastry, in others the more common articles of diet, as eggs, sugar, produce an attack of Urticaria, and this although the food be the best of its kind. It is a mistake to suppose that the lobsters eaten at supper were bad, simply because an attack of Urticaria follows an hour or two after their ingestion. In some persons an attack of Urticaria only occasionally follows the use of particular substances; in others it is the invariable consequence. The patient is said to be poisoned by what he has taken, the friends are greatly frightened, and unless you are familiar with the severe symptoms sometimes present, you too may not be a little alarmed for the safety of your patient. Not long since I was summoned in great haste to visit a young lady. I found her lying on the sofa, unable to walk or even stand without assistance; the surface was cool, the face and hands were puffed up to a considerable size, the tongue enlarged, and to her it felt even larger than it was; the mucous membrane of the lips, cheeks and pharynx swollen. Her voice was altered. She complained that she felt swollen all over. Her friends said, so changed was her appearance that they scarcely knew her. Before I was called to see her, she had been visited by a surgeon residing near; he had recognised the disease, and had assured the friends that there was no danger; but so sudden had been the attack, and so changed the aspect of the girl, that he had failed to quiet their alarm. He had administered an emetic, and the fitness of the treatment was evidenced by half a washbasinful of undigested lamb, mint sauce, and cherry pie. When closely observed, the fulness of the face and hands was seen to be due to numerous wheals evolved in the vicinity of each other. A little antacid stimulant, viz. carbonate of ammonia and soda, followed by a brisk aperient, sufficed for her cure. In two days she was quite well. An attack of Urticaria having such an origin usually terminates in two or three days.

An acute attack of Urticaria sometimes occurs without the patient having committed any error in diet. It is then generally preceded for a day or two by some febrile disturbance. There are no special symptoms present in these cases to indicate that the pyrexia is only the prelude of an attack of nettle-rash. The eruption of the wheals is the first intimation of the exact nature of the disease. This variety of Urticaria ordinarily lasts a week.

When acute Urticaria arises from the patient having eaten some substance which he has imperfectly digested, an emetic, followed by a mercurial and saline aperient, is generally all that is necessary for the cure. If there be much depression at the outset, it may be necessary to give a little ammonia; or, on the other hand, if the febrile disturbance be great, to take a little blood from the arm. The idiopathic acute form of the disease has been termed Urticaria febrilis. More frequently Urticaria is a chronic disease, and it may then last even for years. Sometimes the wheals are all confluent, or almost so, and then the disease is called Urticaria conferta. Occasionally, even in comparatively chronic cases, the wheals that first appear remain out till the patient is permanently well. Urticaria in which the wheals are thus permanent is called Urticaria perstans. Far more commonly the wheals come out in crops, so to say, which last only a few hours, fresh crops appearing with every change of temperature, with every abnormality of diet, or on the slightest friction. The patient comes into the out-patient room, and tells us that when he left home he was covered with eruption, but that now there is scarcely any. Now and then not a wheal appears for a week or two, and then a fresh crop comes out. Urticaria, characterised by these evanescent wheals, is Urticaria evanida. In rare cases the wheals attain a very large size, and then the disease is Urticaria tuberosa; in still rarer cases the patient suffers from the burning, itching, and tingling sensations in numerous parts where no wheals appear, and then Willan called the disease Urticaria subcutanea. However, in regard of the species of Urticaria, all you need now trouble yourselves to remember is, that the disease is now and then a very acute disease, distinctly referrible to an error in diet; now and then an acute disease not referrible to error in diet; and that more often the disease is chronic, the wheals appearing and disappearing rapidly on the slightest cause, or even without any known cause.

In the treatment of the chronic forms of Urticaria you must pay especial attention to the patient's diet. If you find that he is committing no evident error in regard of food, you must

not at once conclude that the disease is independent of diet. In some cases abstinence from coffee, in some from tea, in some from milk, in some from porter, in others from the particular water they were drinking, has been followed by recovery. I know a young lady who always suffers from Urticaria when she resides in a particular locality, from the quality, it seems to me, either of the air or water at that spot; and she informed me that many persons in the same village suffer from the disease. While residing there medicine has little effect on the disease; when she leaves that village no medicine is required for her cure.

After regulating the diet, a mild course of antacid saline aperients is often useful. In other cases saline aperients, combined with a bitter infusion and a mineral acid, seem to be the most efficacious remedies.

A course of cold sea-baths is sometimes followed by recovery when other means have failed. If the patient is plethoric, and the pulse is full and hard, a single blood-letting, to a moderate extent, affords much relief. In obstinate cases arsenic in small doses—as three minims of liquor potassæ arsenitis, three times a day—continued for some time, has effected a cure. Some Physicians attach much importance to quinine in the treatment of Urticaria, in doses of two or three grains three times a day. Colchicum is, with others, a favourite remedy. Carbonate of potash or liquor potassæ, with a bitter infusion, three times a day, is sometimes useful, by correcting deranged conditions of the stomach.

You may very often keep the disease in abeyance, prevent the eruption of fresh wheals, and allay the irritation of those present, by sponging the whole surface night and morning with lemon-juice or vinegar. Mr. Wilson speaks very highly, for the latter purpose, of a lotion composed of bichloride of mercury, from five to ten grains, spirits of rosemary and spirits of wine of each one ounce, and six ounces of the emulsion of bitter almonds.

The child suffering from Urticaria I showed you the other day was cured by a single dose of calomel and jalap. If a child be cutting its teeth, and the gums are hot, dry, and tender, they should be lanced.

VESICULÆ.

I told you in a former lecture, that it is very common to find vesicles stud the surface of patients affected with Scarlatina. In some cases of Erythema fluid is effused under the cuticle in quantity sufficient to raise it into blebs, and in some very rare cases collections of serosity of some size form on the wheals in Urticaria. I have also already mentioned to you my opinion, that the desquamation which follows Scarlet fever, Roseola, Erythema, and the other genera of the order Exanthemata, is due to the effusion of serosity under the epidermis; not enough fluid to raise the cuticle into vesicles or blebs, but yet enough to loosen the attachment of the epithelium. The swelling of the cutis in the Exanthemata, is, no doubt, partly due to the presence of serosity in its substance; and one cannot help thinking that some must almost always escape from the vessels on the surface, as they are more loaded with blood than are those deeper seated.

In the diseases belonging to the order Exanthemata the presence of vesicles is an accident. They are essentials of the diseases in the order Vesiculæ.

SUDAMINA.

In the course of the case of typhoid fever, lately in Ward four, a large number of vesicles appeared about the root of the neck, below the clavicles, at the epigastrium, in the groins, on the abdomen, a little above the bend of the thigh, and on the thorax below the axilla; these vesicles were small, and so transparent that a pretty good light was required to detect them; they resembled at first sight drops of perspiration. There was no redness of cutis around them; after two or three days the vesicles either burst, or the fluid in them disappeared, and there was a little furfuraceous desquamation of the cuticle of the parts they had occupied. These vesicles were sudamina, and they afforded us very good examples of the affection. Sometimes they are much smaller than they were in this case, and then they are more readily detected by the finger than by the eye; the skin feels rough as though covered with papulæ; now and then they are somewhat larger than they were in this case. The transparency of their contents, and the absence of red areola, are the cause why they so often escape detection.

Sudamina usually appear in the course of certain acute and chronic affections, and are especially common in typhoid fever, during the third week of the disease. A single crop of sudamina never lasts more than two or three days. I think, as others have, that these vesicles are seated at the orifices of the sweat ducts, and that they are connected with the occurrence of perspiration. They may cover the whole anterior and lateral regions of the trunk, but more commonly they occupy those parts to which perspiration is often limited, viz., the thighs they occupied in the case of typhoid fever to which I have just adverted.

The contents of the vesicles is almost always acid. Sudamina rarely occur after the middle period of life. They are of no value as a guide for prognosis; and as to treatment they themselves require none; only when you find a crop of sudamina ask the nurse whether the patient has been perspiring profusely, and ask yourself whether the room is well ventilated, the bedclothes not in excess, and the linen clean.

MILIARIA.

Miliary vesicles are acuminated with a red halo around their bases. Their contents quickly loses its transparency, and becomes almost or quite purulent in appearance. Miliary vesicles occur like sudamina in the course of other affections. They are often seen on the trunk and extremities in acute rheumatism. They differ from sudamina in being acuminated, in the opacity of their contents soon after their eruption, and in the redness of the skin around.

Like sudamina, they appear to be connected with the occurrence of perspiration. During the summer months it is very, very common to see the trunk of young children, who perspire freely from exercise or other cause, and especially if they are not frequently washed, covered with a crop of minute miliary vesicles. In these cases, the redness around each vesicle is sometimes much more readily seen than the vesicles themselves, and then you may mistake the disease for Roseola æstiva. Not unfrequently Roseola æstiva is complicated with the eruption of a few miliary vesicles.

Frequent ablution and a gentle purge are all that is required in the treatment of the miliary vesicular eruption of children. There is an epidemic febrile disease of from eight to ten days' duration, characterized by profuse sweating and a miliary eruption. It has been called miliary fever. I have never seen this disease. You will find some cases of it detailed in Rayer's work on Skin Diseases. Some persons use the term miliary vesicles to include sudamina and miliary vesicles proper.

SCABIES.

There is a very severe case of Scabies, or Itch, now in the ward there. I have pointed out to you on that woman's trunk and extremities, papulæ, vesicles, pustules, and ulcers, and small cracks in the skin, between the fingers and toes, and at the bend of the wrist. From some of the vesicles on the inner surface of the fingers, we can see a delicate whitish line, extending for two or three lines, and terminating in a very minute opaque whitish elevation. Here and there on her trunk and extremities are small blackish points, evidently formed of dried blood, and, also, linear abrasions of the cutis.

The eruption in itch is caused by the presence of a minute animal, the *Sarcoptes hominis*, in the under layer of the epidermis. The sarcoptes has been taken from its burrow, placed on a healthy person, and the disease in that way communicated. You will, therefore, easily understand how itch passes from one person to another, and why it is so decidedly contagious.

The eruption appears to be produced thus:—The animal bores a way through the outer layer of the epidermis, and then for some distance onward, in the softer layer of the epidermis. Immediately adjacent to the point at which the animal passes into the epidermis, a vesicle, papula, or pustule is formed. The sarcoptes itself is found at the end of the faint whitish line or burrow, leading from the vesicle or papula. The burrow varies from a line to an inch in length. When the disease affects the delicate skin between the fingers or toes, and continues for some time, the cuticle thickens and cracks. These cracks, which I pointed out to you several times in the case in the ward, are very characteristic of the disease. The only disease of the skin directly resulting from the animal's presence are the vesicles, papulæ, and pustules, and the delicate line leading from some of these. The ulcers which you see on this infant's buttocks, and on the woman's trunk and extremities, the blackish points, the linear abra-

sions, and the broader patches of inflamed patches, are the consequences of injury inflicted on themselves by the patients, in their endeavour to allay the intolerable itching. Hebra has pointed out, that when the paralytic are the subjects of itch, none of these severer effects of scabies are observed. The vesicles of Scabies are scattered irregularly over the part affected; many of them seem buried somewhat in the skin, so that you may mistake them for papulæ. These deep-seated vesicles are never acuminate, and there is little or no redness around them; on the apices of some of the papulæ, a minute vesicle may be detected by the lens; those vesicles, the vesicular character of which is more evident are acuminate, and may, or may not, have some redness around. The pustules are such as I described to you as phlysiaceous pustules; they often attain a considerable size.

The superficial acuminate vesicles are best seen between the fingers and toes and at the bend of the wrist, the disease being recent; the cracks in the same situations when the disease has lasted some time; the buried vesicles on the upper extremities, and where the epidermis is naturally rather thick—the burrows of the sarcoptes on the sides and anterior aspect of the fingers. It is a matter of some interest, as showing the accidental nature, so to say, of the eruption, to know that some good observers have recorded cases in which there were no vesicles, pustules, or papulæ, only the burrows, at the extremities of which were found the sarcoptes; the itching in these cases was as severe as in those attended with an eruption. In old persons, whose skins are thick and not very sensitive to irritants, the eruption is often trivial and papular in character. The disease is then not infrequently confounded with prurigo. I have shown some of you such cases in the out-patients' room. In adults the most common seat of the disease is between the fingers and at the bend of the wrists; in children too young to walk the hands commonly escape, and the parts which usually suffer first and most severely are, as in this child, the buttocks (a) and loins. Scabies never affects the hairy scalp, nor the face in adults, and only very rarely the face in young children. The itching in Scabies is very decided and severe, and greatly increased by warmth. Unless you had witnessed the amount of inflammation and ulceration that may accompany the disease when it affects the delicate skin of young infants, as in the case before you, though you were ever so familiar with the ordinary form of itch in the adult, you would be very likely to make a mistake as to its nature. The dorsum of this child's feet are, you see, almost covered with ulcers; and I would have you note the large vesicles and pustules under the thick cuticle of the sole of its feet, because they are very common in that situation in young children, and very characteristic of the disease.

Scabies never disappears spontaneously. I have seen cases where the disease has lasted for years, its nature having been misunderstood.

Eczema, another vesicular disease, often complicates Scabies. Some of you saw a very cleanly respectable-looking country-woman, who attended a few times as an out-patient in Ward 3. She had an eczematous eruption between the toes and on the dorsum of the foot immediately adjacent. The itching was intolerable, so that she could not refrain from rubbing and scratching the parts. She had been suffering more or less for about two years. Some months before she came to this Hospital she was in London under the care of a Surgeon; nitrate of silver was then applied, and the eruption cured everywhere, excepting between the toes; the itching never ceased. Soon after her return home the disease became almost as bad as before her visit to London. I directed your attention to the thickening of the cuticle between the toes, and to the fissuring of the thickened cuticle, and told you that, although I could see no characteristic vesicles or burrows, yet seeing the obstinacy of the disease between the toes, the thickening of the cuticle, and the cracks, I believed the primary affection was Scabies; that the Eczema was kept up by the constant irritation of the part by friction, and that if we cured the primary disease, the secondary would ease of itself. The result justified the diagnosis and prognosis. A few applications of sulphur ointment, and then a little zinc ointment, cured the heretofore obstinate affection.

(a) The drawing appended to this Lecture was taken by Mr. Tuson from this child.

Treatment.—Sulphur is the best remedy for Scabies. It cures the disease by killing the sarcoptes. In the St. Louis Hospital at Paris, two hours' treatment is considered sufficient for the cure of the disease. The patient, after being well washed with soft soap for half an hour, is strongly rubbed for the same space of time over the whole surface with the sulpho-alkaline ointment of Helmerich, composed of eight parts of lard, two parts of sulphur, and one part of carbonate of potash, and directly afterwards placed in an alkaline bath. The patient's clothes are fumigated with sulphur.

The objections to this method of treatment are, that eczematous eruptions often follow its employment in persons with a delicate skin, and that the ointment stains the linen. The sulphur ointment of the Pharmacopœia does not cure so rapidly, although it does so quite as certainly as the sulpho-alkaline ointment. The great use of the alkali is to remove the superficial layer of epithelium, and so expose the sarcoptes more completely to the action of the sulphur.

Supposing that, from the position in life of your patient, it is desirable to hide the odour of the sulphur, the best scents for the purpose are the essences of bergamot and of lemons; a little bi-sulphuret of mercury will conceal the colour of the sulphur.

Devergie recommends, if the odour of the sulphur be highly objectionable, that the patient be placed for an hour, or an hour and half, daily in a bath containing from two to three drachms of bi-chloride of mercury. Five or six baths, he says, suffice for the cure. Iodide of potassium may be substituted for the bi-chloride of mercury, but then more baths are required. Bazin advises, under like circumstances, that the surface be rubbed daily with an ointment composed of powdered chamomile flowers, lard, and olive-oil, in equal parts.

Mind, when Scabies is present, no matter with what other eruption it is complicated, that you are first to cure the Scabies—thus I shall apply sulphur at once to this child's back: and, again, that if you suspect strongly the presence of Scabies, you are to use sulphur, if possible, to test the truth of your suspicion.

ORIGINAL COMMUNICATIONS.

SERIES OF CASES ILLUSTRATIVE

OF

DISEASES OF THE ABDOMEN,

AND ESPECIALLY OF THE DIAGNOSIS AND TREATMENT OF
ABDOMINAL TUMOURS AND INTUMESCENCE.

By CHARLES J. HARE, M.D. Cantab., L.R.C.P.

Assistant-Physician to University College Hospital, etc.

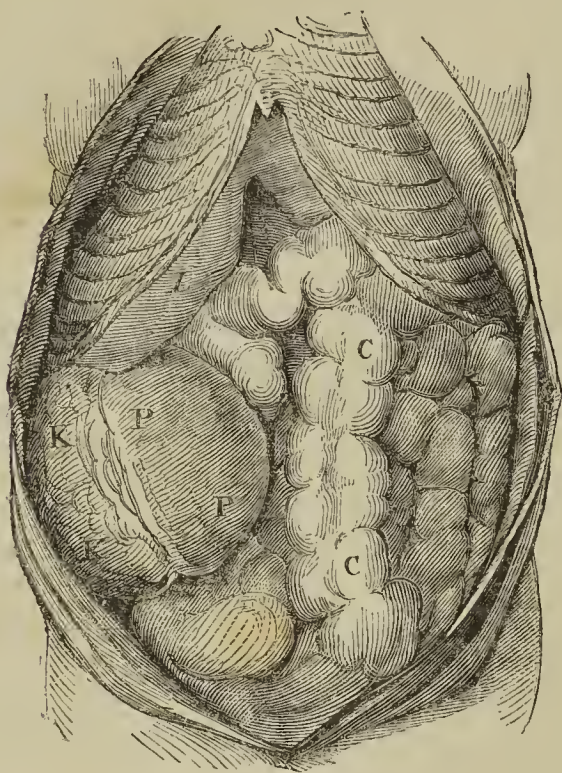
HYDRONEPHROSIS.

(Continued from page 31.)

Autopsy.—The post-mortem examination was made on November 11, the fifth day after death. The body was rather thin, but not emaciated: the right latero- and antero-lumbar regions were slightly more prominent than the left, and a largish, somewhat resisting mass could be detected there. The *right lung* was healthy, except being somewhat congested posteriorly; the *left one* was firmly adherent over a considerable extent, laterally and posteriorly, by old adhesions, to the parietes: there was no tubercle or other deposit in either lung. *Heart* healthy.

On opening the abdomen, the right side of it was found to be occupied by an almost globular tumour, which extended exactly as far as the median line, and vertically from a little above the lowest costal cartilage to the level of the anterior superior spinous process of ileum; a small portion of its upper surface was overlapped (to the extent of rather more than an inch) by the thin edge of the liver: below it, and pushed downwards and towards the median line, was the caput coli, just above which the ascended colon was considerably bent upon itself, and then ascending perpendicularly upwards just to the left of the median line; it was partially adherent to left side of the tumour, as was likewise a portion of the small intestines, another portion having also formed adhesions to the lower part of the tumour, which, posteriorly, was united by false membranes to the right common ileac artery. The

liver was of about natural size, but its lower edge, which was thin, projected a little below the costal cartilages; it was



Nov. 11, 1856.—Drawing representing the exact position of the viscera, except that the ascending colon C, C, (which was in contact with the left edge of the tumour,) has been slightly moved to the left to show more completely the form of the tumour. K K, the kidney. P P, the dilated pelvis of the kidney. L, liver.

adherent at the upper surface of both lobes to the diaphragm, and underneath slightly so to upper part of renal tumour.

The tumour (together with the whole of the ureter) was now removed; it measured $6\frac{1}{4}$ inches vertically, and rather more than 5 inches transversely; though nearly globular, a notch existed at its lower part, and a furrow extended round it vertically, dividing it into two rather unequal portions; of these, the right one consisted of a considerably hypertrophied, but at the same time much dilated kidney, hard and resisting to pressure; the left portion was formed by an enormous pelvis distended with fluid, the whole quantity contained being from $1\frac{1}{2}$ to 2 pints. On taking the mass in the hands and pressing very firmly, no fluid escaped by the ureter; examining into the cause of this, it was found that the ureter, at a little distance from its origin was coiled on itself—like a turn and a half of a corkscrew brought close together—and that this coil was adherent to the lower part of the dilated pelvis; above this part the ureter was slightly dilated, below it not at all. The coils just mentioned acted as a valve-like obstruction to the course of the urine, for on gently dissecting away, with the point of a scalpel, the tissue which held the coils together and united them to the tumour, the retained fluid gushed readily out by the end of the ureter, in a full stream. There was no calculus either in the ureter, pelvis, or kidney substance. The walls of the pelvis were thicker than natural; its lining membrane was quite pale, and presented no trace of inflammation at any part; the infundibula were greatly dilated, and the papillæ flattened out or, as it were, pushed backwards, so that the infundibula formed deep cavities in the renal substance, and on the surface of the kidney there were, here and there, slightly rounded elevations which corresponded with these cavities, the substance of the kidney over them being thinner than elsewhere. The kidney substance itself measured 6 inches by $2\frac{1}{2}$, and weighed, without the dilated pelvis, 11 ounces. The fluid contained in the pelvis had an urinous, somewhat ammoniacal odour; was of a dirty, darkish amber colour, and slightly turbid. It was afterwards found to have a specific gravity of 1017, and to contain a small amount of albumen.

The *left kidney* was entirely covered by the intestines, and lay deeply in the lumbar region. On removal it was found to consist of a large flaccid bag or sac, varying from about five to six inches in diameter, which contained but about an ounce

of fluid, but which, if filled, would have formed a tumour fully as large as the one which existed on the right side. The whole sac presented thin, membranous walls, here and there studded with islets of renal tissue; these were chiefly situated at the posterior and upper part of the specimen, and scarcely in any part increased the thickness of the parietes to above the eighth of an inch, except at one part, where there was a mass, about the size of two filberts placed end to end, and which seemed to represent what had originally been the upper portion of the kidney. So completely obliterated were the lines of demarcation between the different portions of the viscus, that the pelvis, infundibula, and calices formed, in reality, but one huge cavity. The mucous membrane was white and sodden-looking; the fluid in the cavity was of light colour, and somewhat turbid. The ureter was dilated at its commencement, and not far from that point presented a condition almost exactly similar to that observed in the ureter of the opposite side, so that when the kidney was removed, the little fluid which it contained did not escape, though no ligature was applied to the ureter. This kidney, like the other, was free from any calculus.

The *bladder* was contracted, perfectly empty; the mucous membrane pale; no appearance of disease of any kind. The *uterus* was slightly larger than natural, and in its substance were two small, fibrous tumours, one about the size of a small horse-bean, the other rather less.

Commentary.—Though diseases of the abdomen are second to none, either in interest or importance, there are difficulties to contend with in the diagnosis of them which do not exist with respect to many other classes of disease, and especially with regard to thoracic affections. The facilities which, by the introduction of auscultation and percussion, have been afforded for ascertaining the physical condition of the lungs and of the heart are so great, that the diagnosis of diseases of the chest has of late made advances equalled in the case of no other class of affections. Cases of difficulty and doubt must, indeed, from time to time occur, but, as a general rule, not only can the presence of the lung- or heart-disease be ascertained, but the amount of it can be determined, and its advance or decrease from day to day measured and recorded with a preciseness which is both highly important, and which gives a great charm to the study of chest-affections. I think, indeed, that in certain cases too much attention may be—perhaps is—paid to the *mere physical state* of the organ affected, too little to the constitutional condition of the patient, which, as regards treatment and the welfare of the sufferer, is one of the most important objects for consideration. But such neglect of general symptoms forms no sound argument against the value of physical diagnosis. Inattention to the one may prove want of knowledge or judgment on the part of the observer, but it by no means detracts from the importance of the information which may be yielded by the other.

Owing to the nature of the abdominal organs, very few of the auscultatory phenomena which are of so much use in the exploration of the chest can, in any case, be present, and in many abdominal diseases auscultation affords us no assistance. On the other hand, percussion, when practised with care, very frequently yields information of the highest importance; and even simple inspection may sometimes reveal changes in the form or movement of the abdomen which direct our further inquiries into the right path. By palpation, too, we can, in abdominal cases, often obtain results—aids, and assistance in our investigations—such as *this* mode of physical examination, at least, will not yield when resorted to for the elucidation of thoracic affections. Some of the chief difficulties as regards the abdomen lie, however, in the fact of the comparatively numerous organs which it contains, the mobility of many of them, and the remarkable alterations in form and size which they may undergo—alterations which, for degree and extent, are, in some instances, such as find no counterpart in the changes to which the thoracic viscera are liable.

None, therefore, will be more willing than those who have paid considerable attention to abdominal diseases to admit freely the great difficulties (to which I have just very briefly alluded) connected with their diagnosis. Still, with the advances of pathological knowledge, the habit of careful investigation, and the assistance derivable from the chemical and microscopical examination of the excreta, etc., considerable advances with regard to this class of affections have been made, and forms of disease are now comparatively easily recognis-

able which formerly it would have been impossible to diagnose: and we may rest assured that the same means which have already effected so much will, by steady culture, yield yet more valuable results. With regard to the following series, I may venture, I hope, to say, that I have endeavoured to record the cases with care; and, as I have been in the habit, for some years past, of taking sketches of the form and appearance of the abdomen when I have had the opportunity, and when the case has presented points of importance, I trust that, by transferring some of the sketches to these pages, I may be able to make the cases more intelligible, as well as more useful and interesting, than they would be without such illustrations. I shall be happy if by these means I am enabled to add somewhat to our store of knowledge concerning a class of diseases in which I have long been much interested, and to illustrate some points in their pathology, diagnosis, and treatment.

[To be continued.]

A CASE OF FRACTURE OF THE NECK OF THE SCAPULA, AND OF THE CORACOID PROCESS.

By BERNARD E. BRODHURST.

Assistant-Surgeon to the Royal Orthopædic Hospital.

IN his edition of Chelius' "System of Surgery," Mr. South says of fracture of the neck of the scapula, "There seems to be good reason for believing that this accident never occurs. That which has been so long described under this name has been shown by Astley Cooper to be a fracture of the head of the upper-arm. I believe there is not any existing specimen of fracture of the neck of the bladebone." Vol. i. p. 549.

I lately saw the following case, which I shall be glad to place on record in the pages of the *Medical Times and Gazette*:

A gentleman, aged 62, was thrown from his horse in the hunting-field during the season of 1854-55. He is a muscular man, weighs twelve stones, and is five feet ten inches in height. At the time of the accident he was riding with the pack in full cry, when his horse, setting his foot in a hole, fell. The rider was thrown on to his right shoulder, and fell clear of his horse. I saw him soon after the accident, and found the acromion very prominent, with a deep depression beneath it, the deltoid flattened, the arm lengthened and drawn away from the side. The shoulder could be restored to its normal shape, and the arm be brought close to the side, on raising the arm, the scapula being fixed with one hand and the elbow grasped with the other; but the deformity recurred so soon as the support was removed.

Every motion of the limb was acutely painful. Crepitus was very distinct on moving the scapula, having raised the humerus. But crepitus might also be felt, though less distinctly, without raising the humerus to its proper position. The coracoid process was also fractured. It afforded crepitus entirely distinct from that which was communicated from the neck of the scapula.

The limb did not present the appearance of a dislocation of the humerus into the axilla, and the accident could not have been mistaken for a dislocation. Also, the appearance of the shoulder and the position of the limb were sufficiently peculiar to prevent this accident being mistaken for a fracture of the neck of the humerus.

The treatment consisted of supporting the arm from the elbow against the side, a small pad being placed in the axilla. The right use of the extremity was not regained in less than eight months.

The following case is related by Du Vernoy (*Traité des Maladies des Os*, tome i. p. 227):—"A girl, about twenty years of age, fell into a stone quarry, where she was found dead. The body was much bruised, and several ribs were fractured. On examining the left arm I believed it in the first instance to be dislocated; but, having made an incision through the integuments and muscles, I found the head of the humerus occupying its proper capsule, and recognised a fracture of the neck of the scapula. The neck of the scapula and the coracoid process were detached from the body of the bone."

Other cases are recorded by French and British surgeons; yet the accident must be one of considerable rarity, or it would have been met with by Sir Astley Cooper and by Mr.

South. The symptoms of the fracture of the neck of the scapula in the case which I have above related were so distinct, and the crepitus imparted by the fractured neck, as well as that of the extremity of the coracoid process, was so easily obtained, that I am convinced the nature of the accident could not fail to be recognised by any one acquainted with fractures about the shoulder.

POISONING BY MORPHIA.

A CASE WITH SYMPTOMS SIMULATING STRYCHNINE POISONING.

By CHARLES J. SHEARMAN, B.A., M.D. Lond., F.C.S.

THE chemical evidence regarding the passage of the various alkaloids into the urine is not very copious or satisfactory, and the clear indications of the presence of morphia in the urine in the following case, also the peculiar and marked symptoms following its administration, induced me to record it.

A lady, married, aged 26, suffers most severely from painful menstruation. She has been in the habit of taking during the last three years from time to time a dose of the following mixture, which scarcely ever failed to relieve the severe dorsal and abdominal pain and spasm, from which she suffered at those periods:—℞ Morphiæ acetatis, g. iij; spir. etheris sulph. comp., ʒiij; mist. camphoræ, aquæ destillatæ, aa ʒiij. M. ft. mist. "One tablespoonful for a dose."

On the 24th of October last the pain was very severe. She took a dose about 4 p.m., repeated it at 7 p.m., there being no relief. Soon after the second dose I was sent for, and found her suffering from severe lumbar and inguinal pain of the usual character, with bearing down, and copious menstrual flow; the abdomen tender to the slightest touch, even the pressure of the bedclothes was most distressing; the pulse was quiet; skin moist, and in other respects natural; tongue clean; stomach irritable.

The mixture was repeated about 11 p.m. Half an hour after this I was again summoned, and found her limbs violently twitched from time to time under the clothes, spasmodic twitchings of the face, first on one side, then on the other; difficulty of deglutition; spasmodic action of the muscles of the arms and legs (chiefly of the extensors), and of the abdominal muscles; and while I remained with her partial opisthotonos occurred, and she frequently was jerked upwards and to the right side by the violence of the muscular action of the left. Titillation of the skin and quick pressure of the muscles at once induced the twitchings. Consciousness was perfect. Volition did not induce the spasms. No hysterical symptoms. The twitchings had occurred, she then stated to me (but only slightly), after each former dose of the mixture, but thinking the mixture was the cause of it did not mention it. Its subsequent violence alarmed her. During the continuance of these symptoms the original pain continued unabated.

I at once ascertained whether there had been any error in the mixture; it was correctly made up. Having seen repeatedly similar (but to a much slighter extent) symptoms from morphia I discontinued the mixture, and directing, if the spasms did not soon cease, to give Acid. hydrocyan. dilut. (Ph. L.) miiij; aquæ fontanæ ʒss. every three hours, and the spine to be gently rubbed with the following:—℞ Tinct. aconiti (ex formula Flemingii); lin. saponis, aa ʒj. M. ft. linimentum; and the whole of the urine to be carefully preserved for me to examine, left her about 2 a.m. on the 25th.

The next morning (October 25) she was quite well; the pain had left her; also the spasms, which had been markedly relieved by the mixture and the rubbing, and 6 ounces of high-coloured urine, loaded by urate of ammonia, passed. She had great difficulty in micturition; and the pain attending the spasms was dull, aching, and left a weary sensation in the limbs.

The urine I divided into two equal portions. One half I sent to Dr. Allan of Sheffield, an excellent chemist who, under Liebig, has been much engaged in toxicological inquiries, asking him to ascertain whether there were any morphia in it; the other half I reserved myself.

I subjoin Dr. Allan's report:—

"I have examined the specimen of urine received from you on the 27th ultimo, and distinctly find evidence of morphia therein. I can, upon evaporating the urine, extracting the

residue with alcohol, and decolourising by animal charcoal, obtain the characteristic reactions with a per-salt of iron and with nitric acid.

"Sheffield, September 2, 1856."

"I am, &c.

"JAMES ALLEN."

My own mode of evaporating, extracting with alcohol, evaporating alcoholic extracts, dissolving in distilled waters acidified by acetic acid, precipitation by potash, decantation, and washing with alkaline water, and resolution in dilute acetic acid, gave distinct evidence of morphia, especially with iodic acid.

The first point of interest in the case is the character of the symptoms. The cerebral functions unaffected, the sensory nerves either unaffected, or excited on the other hand, (for the relaxation was at once induced by the slightest irritation of the skin, even by drawing the sheet over the skin,) and the excited condition of the spinal chord; for the reflex action was marked in all regions of the body—symptoms considered so peculiar to the action of strychnia as to lead to a suspicion of the use of that alkaloid.

Secondly. The relief obtained by the use of one of the most direct spinal sedatives (hydrocyanic acid), and the use of a remedy which produces a diminution of the sensory function of the nervous fibres, acting more particularly on their peripheral extremities. The character of the symptoms induced by the morphia, and the mode of relief adopted, must both lead to the view that the reflex function of the spinal chord was excited. And should morphia be an excitant of the reflex action, we can readily understand the mode of its action in opium eaters, and the value which is attributed to it by them. There are many actions of the nervous system which, originally voluntary, become habitual, and are then carried on without the exercise of volition; they are similar to the instinctive; and whether termed consensual or automatic, are, to all intents and purposes, reflex—such are riding, walking, etc.; and if by stimulation of the reflex system during the period at which these actions are being carried on we can render the exercise of volition unnecessary, or less necessary, we do away with fatigue. Such may explain the value of opium to the Tartar courier, or the Scandinavian post-boy, and also to the dreamy German; reflex action tires far less readily than volitional.

May not also the remedial value of opium in very small doses in adynamic fever, with a dichronous pulse and subsultus, in delirium tremens, in the last stages of exhaustion of phthisis, and in many cases of anæmia, be explained on the view of morphia being a spinal excitant?

Thirdly. The detection of a considerable quantity of morphia in the urine, after the administration of $1\frac{1}{2}$ grain, bears somewhat on the question of the decomposition of the alkaloids being a necessary condition of their influence on the nervous system.

Barruel stated he had found morphia in the blood and urine of a person suffering from a poisonous dose of laudanum. Dublanc, Lassaigne, and Pereira, have failed to discover it in such cases; nor have I been enabled to discover its presence in urine of persons who have consumed six grains of opium daily; and also been rubbed in freely with the aqueous extract of opium. But in my cases the ordinary effects of opium on the cerebrum have been produced, except in one case, where no sleep attended its exhibition; but the twitching alluded to, and in the urine of this patient (a woman, unmarried, aged 32, suffering from violent spasmodic affection of the abdominal muscles, probably hysterical), I had sufficient evidence to suspect strongly its presence, but could not satisfy myself of the certainty of it.

Since Runge (a) found the urine of animals to whom belladonna, stramonium, and henbane, had been given caused dilatation of the pupil of another animal on its application; and Letheby (b) has found also the active principles of belladonna, opium, hemlock, aconite, to exist in the urine under the same circumstances by the same means; and quinine, strychnia, and morphia, are chemically proved to pass into that fluid, even when given in very small doses, the amount of decomposition necessary to their therapeutical action must be slight; and also when we find, as in the case of the *Amanita Muscaria*, so small an amount necessary to produce violent effects, and that the blood of an animal poisoned by urari poison will poison another animal into whose vessels it is

injected (c), when there can be little doubt the efficacy of the urari depends on an alkaloid, the balance of evidence in favour of the decomposition being trivial seems very strong. Sheffield.

ACCOUNT OF A CASE IN WHICH THE ADMINISTRATION OF CHLOROFORM WAS FATAL.

By JAMES PAGET,

Assistant-Surgeon to St. Bartholomew's Hospital.

I am anxious to place before the profession, at the earliest opportunity, a narrative of a case in which chloroform proved fatal in my private practice.

The patient was a boy, nine years old, of delicate constitution, and of nervous, timid disposition; but with no indication of any organic disease, except that for which the operation was to be performed: namely, a tumour of the scapula; for which it was proposed to remove the greater part of that bone.

At $8\frac{1}{2}$ a.m., on February 28th, after the patient had passed a night of sound sleep, the chloroform was first administered in a room adjoining that in which the operation was to be performed. He was alarmed at the thought of being put to sleep, and of what would then be done, and was very averse from taking chloroform, but he was persuaded to inhale it; and, though not without resistance, yet with less than is commonly made by patients of the same age, he was brought under its full influence in about three minutes. He sat in bed during the first few inspirations, and after these, was recumbent. It was observed that two or three deep inhalations were quickly followed by complete insensibility; and the next few inspirations were stertorous. He was at once carried, in the horizontal posture, into the room, and laid on the table, arranged for the operation.

Three or four minutes passed while we were arranging his position and his dress, and while I was pointing out to those who were to assist me the proposed plan of operation. During this time the influence of the chloroform so far passed off, that he became sensible, displaced his coverings and pillows, said something expressive of discomfort, and vomited a small quantity of frothy fluid. (He had taken no food since the previous night, when he had had a good supper.) A very small quantity more of chloroform was slowly inhaled, and he became again nearly quiet, and was again placed on his side. I was on the point of commencing the operation, but as he again, by movements, indicated some degree of sensibility, and changed his posture, about forty drops more of chloroform were poured on cotton wool, inclosed in a fold of lint—an inhaler, with the chloroform on sponge, having been previously used. The lint was held, about half an inch from the face, by Mr. Thomas Smith, my usual assistant in operations. The patient inhaled lightly for a few times, then made one long inspiration, and appeared to pass at once into deep sleep. Except that he thus appeared to come suddenly under the full influence of chloroform, no external change was visible; but, a few seconds later his pulse, which had been carefully watched, and had been to this time normal, suddenly began to beat very quickly; then it ceased for two or three seconds; then beat rapidly several times, with a kind of flickering movement; and then ceased to be perceptible.

Just before this change of the pulse was observed, the chloroform had been withdrawn. The one deep inspiration was followed by a few stertorous breathings, but after these he breathed naturally, his complexion and features showed no change, he seemed only calmly asleep, and in this state he continued breathing naturally, and with no change in his appearance, but pulseless, for at least a minute. Then his breathing became less frequent, and seemed as if it might soon cease; his face grew pale, and his lips very slightly livid.

With the help of cold water sprinkled on his chest and face, and cold air blown on his face and throat, he was raised from this state of defective breathing in about two minutes, and again breathed deeply and freely, though slowly, (probably about twelve times in the minute.) He thus breathed for two or three minutes, and during this time the lips, and the pale

(a) Orfila, *Traité de Toxicologie*, t. ii. p. 266.

(b) London Medical Gazette, 1847.

(c) Kolliker on Urari and Strychnia, *Philosophical Transactions of the Royal Society*, May, 1856.

or slightly livid parts of the face, became pink again, and though no pulse could be felt at the wrists, the heart was heard acting. During this time, also, some wine and brandy were poured into the mouth, and passed down the œsophagus, but without any evident movements of swallowing. His breathing again became gradually infrequent and feeble. Cold air and sprinkling with water, frictions and percussions of the chest, scarcely increased the breathing, and in less than two minutes it ceased. Artificial respiration, by the method of Dr. Marshall Hall, was immediately employed, and many times during the first five minutes of its employment the artificial inspiration obtained, when turning the body over to its side, was followed by a distinct, and sometimes even a full muscular inspiration. But at the end of about five minutes these signs of life ceased, fæces escaped, and no more indications of life appeared, though the artificial breathing, the friction of the limbs, and other means for resuscitation, were continued for twenty or more minutes.

I refrain, at present, from all comments on this case. Only, I wish to call particular attention to the fact that good breathing was maintained, and, after a suspension, was renewed, long after the heart had ceased to act with sufficient force to produce a pulse at the wrist. And I would add, that this narration is sanctioned and considered to be exact, by the four gentlemen who were to have assisted in the operation, and to whom I am greatly indebted for their counsel and assistance in the greater difficulty that we had to cope with.

THE LONDON

PRACTICE OF MEDICINE AND SURGERY.

HOSPITAL NOTES.

MYELOID EPULIS OF THE LOWER JAW.—On Saturday last Mr. Paget removed an epulis, about the size of a small walnut, from the alveolar process of the right side of the lower jaw. Externally it was hard and gum-like, and on its surface was a patch of ulceration. Under the microscope its tissue consisted of fibroid elements and myeloid cells; the latter were large and unusually fine. Mr. Paget, who has recently operated at St. Bartholomew's on a series of cases of this class, is an advocate for very free excision. He uses either the cutting forceps or a small key-hole saw (preferring the latter), and takes away the whole of the alveolar process from which the growth springs. He teaches that this is the only method of preventing recurrence. Mr. Lloyd, on the contrary, at the same Hospital, states that he has very rarely indeed excised any portion of bone, always contenting himself with scraping away the growth from the periosteum, and then during the process of healing applying caustic freely to any suspicious spots. Mr. Paget objects to this method, that it is in the end more painful and troublesome than the cutting away of the alveolus.

AMPUTATIONS IN VERY FEEBLE PATIENTS.—**LIGATURE OF THE FEMORAL ARTERY IN THE COMMENCEMENT OF THE OPERATION.**—Mr. Stanley, at St. Bartholomew's, last Saturday had occasion to amputate in two patients, both of whom were reduced by the disease to a state of extreme debility. One of them suffered from ankylosis of the knee, the soft parts, skin, etc. having also been disorganised by sloughing, etc. up to within a little of the groin. The operation had to be performed just below the great trochanter. Blood being of the utmost value, it was decided to tie the femoral artery before completing the incisions; and, accordingly, it was divided in the first incision, which was made to cross the front of the limb. Having been secured without any loss whatever of arterial blood, a flap was cut posteriorly, and the amputation completed. The measure was one of caution, which must be most highly approved. It is to be wished that surgeons were more often willing to sacrifice the *éclat* of an operation by attention to such details, which not infrequently are of extreme importance to the patient's chance of recovery.

PROFUSE ARTERIAL HÆMORRHAGE IN TAPPING AN OVARIAN CYST.—About a fortnight ago, in tapping an ovarian cyst, with the intention of injecting it with iodine, an accident occurred to Dr. Barnes, at the Metropolitan Free Hospital, which is of some interest. The woman had been tapped on

four previous occasions. A full-sized trocar was used, and was inserted about a hand's breadth to the left of the median line, and almost close to a former cicatrix. A few pints of turbid fluid having escaped, it became evident that what was flowing was almost pure blood. It flowed very freely, and at one time, on moving the canula, a distinct jet was perceived. It was clear that an artery of some size had been wounded. The woman rapidly becoming faint, all idea of going on with the injection was abandoned, and attention turned to the arrest of the bleeding. A strong ligature was attached to a piece of sponge, and the latter pushed down the trocar, in the hope that by drawing it outwards it might be made to compress the vessel and plug the wound. The sponge, however, unfortunately slipped out on the withdrawal of the canula, and the plan thus failed. Soon after the removal of the canula, the bleeding externally ceased, but within a few minutes the cellular tissue beneath the skin had become distended with blood, and a circumscribed fluctuating swelling, the size of two fists, had formed. The woman was now pale and faint, and it was just decided (Mr. Chance and Mr. Hutchinson being present) to cut down and seek the vessel, when it was observed that the swelling had ceased to increase. Some wine was given, and the patient watched (her abdomen exposed to the air) for about an hour, when no further bleeding occurring, it was resolved not to interfere. The bleeding did not recur, and the patient slowly recovered from its effects. The extravasated blood remained fluid, and was subsequently evacuated. Not long ago a case in which hæmorrhage from tapping proved fatal came under our notice. In it the bleeding was wholly into the abdomen, while in Dr. Barnes's case there was no reason to think that any took place internally. Of course no blame whatever attaches to the operator in such cases. The wonder is that with such an instrument as a trocar the accident should ever happen.

PALLIATIVE TREATMENT OF PROLAPUS UTERI.—Dr. West does not share the confidence which some are disposed to place in operations for diminishing the vagina and its outlet, as a means of relief in prolapsus uteri. In his practice at St. Bartholomew's he never resorts to them. The following case will exemplify his usual plan of operation. A poor woman, aged 45, presented herself in his out-patients' room, who had for long suffered from it. The uterus came down externally, and its cervix was much thickened. Dr. West contented himself with directing the following plan to be carried out:—The injection of oak bark and alum to be used every day, and always when up a T bandage of twilled calico to be worn. On the perineal band of the bandage a horse-hair cushion, covered with leather, was to be fitted so as to slide backwards and forwards, and by this the vulva was to be supported. It is manifest that this plan could only be palliative. Dr. West stated that he did not like pessaries in the generality of cases, as they not only tend to further dilate the vagina, but are difficult of management by the poor. As regards operations, he thought the results obtained by Fricke, and other continental Surgeons, were not encouraging. In the wealthier classes confinement to the couch is an important means of treatment, and pessaries, for short periods at a time, are sometimes beneficial. We shall shortly take an opportunity of examining how far Dr. West's opinion as to the results of Fricke's operation is borne out by the experience of London surgeons. By Mr. Baker Brown, Dr. Savage, Mr. Spencer Wells, &c., it has been repeatedly performed, and is very highly thought of.

WUTZER'S RADICAL OPERATION FOR INGUINAL HERNIA.—Mr. Holmes Coote performed Wutzer's operation on a man of about 55, last Saturday, on account of a troublesome inguinal hernia. The instrument was very easily adjusted, and is to be retained for about eight days. A dose of opium was ordered, to allay pain and irritability. This has not been found necessary by other surgeons, as pain is not complained of unless the cylinder and cover are screwed together too tightly.

MALIGNANT TUMOURS IN THE THIGH.—The woman, under Mr. Curling's care, whose case we mentioned at page 503 for Dec. 13, died about a fortnight ago. The growths proved to be soft cancer. The right supra-renal capsule was involved in a growth of cancer as large as a fist. The lumbar glands were enlarged, and several scattered deposits of cancer were seen in the muscular substance of the heart. The trial of the lotion of chloride of zinc, spoken of at page 115, Jan. 31, had not been carried out, as the woman refused to submit to the pain it caused.

THE SULPHATE OF ZINC, AN EFFICIENT BUT NOT A PAINLESS ESCHAROTIC.—In a case under his care in University College, of epithelial cancer of the labium and inguinal glands, Mr. Erichsen is making trial of Dr. Simpson's new escharotic, the sulphate of zinc. He has been well satisfied with its effect in cleaning the sores, though it is very doubtful whether or not the whole of the diseased structure has been destroyed. Three or four applications have been made, and it is now intended to let the sores, which look clean, heal. One thing is quite certain, that is, that the application is very painful. On each occasion it caused several hours' severe pain. Mr. Erichsen thinks it may be considered rather less severe than the chloride of zinc, but does not believe there is much difference. It must be observed that the powder was not mixed with morphia, however, as recommended by Dr. Simpson.

EXPECTED OPERATIONS.—At St. Bartholomew's on Saturday (this day) Mr. Lawrence will perform an excision of the elbow-joint. At King's College, Mr. Fergusson has a case in which a scirrhus breast is to be removed, and one of ligature of varices. At the London, on Thursday next, Mr. Luke will probably amputate through the thigh, on account of malignant ulceration of the leg.

THE PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

STATISTICAL REPORT OF THE PRINCIPAL OPERATIONS PERFORMED DURING THE LAST SIX MONTHS OF 1856.

(Continued from page 215.)

THE subjoined Report comprises the following Hospitals:—Addenbrooke's (Cambridge), the Birmingham (Queen's), the Berks Royal (Reading), the Cheltenham General, the Cumberland (Carlisle), the Derby General, the Dorset County (Dorchester), the Dundee Royal Infirmary, the Durham County, the Gloucester, the Hitchin General, the Hull, the Leeds, the Leicester General, the Liverpool Royal, the Liverpool Southern and Toxteth, the Margate Sea-bathing Infirmary, the Nottingham General, the Sheffield General, the North Staffordshire (Etruria), the South Staffordshire (Wolverhampton), the Staffordshire General (Stafford), the Sussex County (Brighton), the West Norfolk and Lynn (Lynn), and the York County Hospital.

AMPUTATIONS.

	Number.	Recovered.	Under treatment.	Died.	Percentage of deaths.
Double... ..	1	1	...	2	0.0
<i>the Thigh</i> —					
Primary	9	7	...	2	22.2
Secondary	4	2	...	2	50.0
For diseased joints, tumours, or ulcers	24	18	...	6	25.0
Total	37	27	...	10	27.0
<i>Of the Leg</i> —					
Primary	21	16	1	4	19.0
Secondary	7	3	2	2	29.4
For diseased joints, etc.	27	22	...	5	18.5
Total	55	41	3	11	20.0
<i>Of the Foot</i> —					
Primary	5	5	...	...	0.0
Secondary	1	1	...	...	0.0
For diseased joints, etc.	3	2	...	1	33.3
Total	9	8	...	1	11.1
<i>the Upper Extremity</i> —					
Primary	21	18	...	3	14.2
Secondary	4	2	...	2	50.0
For diseased joints, etc.	12	11	...	1	8.3
Total	37	31	...	6	16.2
Gross total of all cases	139	108	3	28	21.4

Double Amputation.—Case 1.—The Durham: Mr. Shaw.—A healthy navvy, aged 26. Both legs had been crushed in a railway accident. Primary amputation of both below the knees was performed immediately after his admission. Recovered well.

Of the Thigh.—Case 2.—The Derby Hospital: Mr. G. Johnson.—An unhealthy lad, aged 19, the subject of diseased knee-joint for twelve months. Amputation. Recovery. Case 3.—The South Staffordshire: Mr. MacMunn.—An Irishman, in feeble health, aged 56. Amputation, on account of a very large old-standing ulcer of the leg. Recovery. Case 4.—The Nottingham: Mr. Wright.—A man, aged 43, in good health, but much reduced by profuse hæmorrhage. Primary amputation, on account of the leg having been crushed in a thrashing machine. Recovery. Case 5.—The Nottingham: Mr. Thomas Wright.—A man, aged 45, admitted on account of a compound fracture of the thigh, close to the knee-joint. The wound in the skin was small, and an attempt was made to save the limb, but suppuration involving the knee-joint, secondary amputation was performed. Recovery. Case 6.—The Nottingham: Mr. Thomas Wright.—A healthy boy, aged 13. Primary amputation, on account of a compound comminuted fracture. Recovery. Case 7.—The Liverpool Royal: Mr. Stubbs.—A delicate lad, aged 17, the subject of diseased knee-joint. After the amputation he was in a critical state for three days, on account of peculiar nervous irritability. Recovered. Case 8.—The Leicester: Mr. Paget.—A healthy lad, aged 18. Primary amputation three hours after the accident, on account of a severe compound fracture of the leg. Recovered. Case 9.—The Birmingham: Mr. Sands Cox.—A healthy girl, aged 12. Her left leg had been crushed by a wagon two years ago. The whole limb, from the knee to the ankle, was in a hopeless condition from ulceration, sinuses, etc. Amputation. Recovery. Case 10.—The Cheltenham: Dr. Wright.—A woman, aged 22. The subject of diseased knee-joint. Amputation. Recovery. Case 11.—The North Staffordshire Infirmary: Mr. Ball.—A woman, of middle age, in poor health. Amputation on account of diseased knee-joint. Case 12.—The York: Mr. Husband.—A child, aged 3. The subject of diseased knee-joint. The joint was disorganised, and the leg so dislocated that the child used to carry it on its chest. Amputation. Recovery. Case 13.—The York: Mr. Hey.—A lad, aged 19. The subject of an ankylosed knee-joint, from old disease. The limb was useless. Amputation. Recovery. Case 14.—The York: Mr. Husband.—A man, aged 21, in poor health, the subject of acute abscess in the knee-joint. The abscess had not given way. Amputation. Recovery. Case 15.—The Bradford: Mr. Poppleton.—A strumous emaciated boy, aged 14. Amputation, on account of diseased knee-joint of four years' standing. Recovered. Case 16.—The Bradford: Mr. Terry.—A strumous man, aged 22, in an extremely low state from old-standing disease of the knee-joint. Amputation. Secondary hæmorrhage on the eighteenth day. Recovery. Case 17.—The Bradford: Mr. Meade.—A boy, aged 18. Admitted on account of encephaloid disease of the lower part of the femur. The disease was of three months' duration, and he was in poor health. Amputation. Recovery. No return of the disease as yet. Case 18.—The Gloucester: Mr. Wood.—A healthy man, aged 26. Primary amputation on account of his leg having been torn off at the knee in a railway accident. Recovered. Case 19.—The Gloucester: Mr. Wilton.—A railway guard, aged 31, in good health. Primary amputation on account of a crushed leg. Recovery. Case 20.—The Hull: Mr. Huntingdon.—A man, aged 24, in poor health, the subject of diseased knee-joint of long standing. Recovery. Case 21.—The Dundee: Dr. Crockatt.—A strumous lad, aged 11, in much reduced health. Amputation on account of diseased knee-joint of four years' standing. Recovery. Case 22.—The North Staffordshire: Mr. Turner.—A healthy man, aged 35. Primary amputation on account of compound fracture. Recovered. Case 23.—The North Staffordshire: Mr. Ball.—A boy, aged 12, in poor health. Amputation on account of diseased knee-joint. Recovery. Case 24.—The Royal Berks: Mr. Moxhay.—A girl, aged 18, emaciated and very feeble, the subject of diseased knee-joint, of ten months' duration. Amputation. Recovery. Case 25.—The Royal Berks: Mr. Moxhay.—A healthy-looking young woman, admitted on account of medullary cancer in the upper part of the right fibula. The tumour was the size of a large orange, and of three months' growth. Amputation. Recovery.

Case 26.—The Sussex County: Mr. Lowdell.—A man, aged 45, who had been admitted a month previously with a severe compound fracture of the tibia and fibula. Erysipelas followed, and suppuration in the knee-joint occurred. Amputation through the thigh was followed by great improvement. Under treatment. *Case 27.*—The North Staffordshire: Mr. Turner.—A man, aged 41, in good health; primary amputation of the thigh on account of severe compound fracture. Recovery. *Case 28.*—The Royal Berks: Mr. Moxhay.—A thin, cachectic man, aged 22, a shepherd, admitted on account of osteoid cancer in the lower part of the right femur. There was a small tumour also in front of the bone. The disease was of three months' duration. Amputation. At the time of report the stump was just healed, but there were some symptoms of disease in the left lung. *Case 29.*—The Hull: Mr. Huntingdon.—A man, aged 30, admitted on account of compound fracture of the tibia and fibula in the upper third. A portion of loose bone was removed, and an attempt was made to save the limb. Sloughing occurred, and amputation was performed through the thigh on the eighth day. He never rallied well, but sank slowly, and died on the twelfth day after the operation. He had been of very intemperate habits. *Case 30.*—The Leicester: Mr. Paget.—A healthy woman, aged 50, admitted on account of a large fibrous tumour on the upper part of the tibia. The tumour was of seven months' duration, and the inguinal glands were slightly but decidedly enlarged. Amputation through the lower third of the thigh. She sank into a feeble state, had large bed-sores, and the stump assumed an unhealthy action. Diarrhœa followed, and death occurred in the fifth week. *Case 31.*—The Gloucester: Mr. Wilton.—An engine-driver, aged 45. Primary amputation of the thigh on account of crushed leg and knee-joint. He had sustained also severe contusions. He never rallied after the operation, and death occurred on the second day. *Case 32.*—The Bradford: Mr. Terry.—A woman, aged 46, extremely reduced by disease of the knee-joint and lower part of the femur. The disease was of many years' duration. After the amputation she did not rally. Death took place on the tenth day. *Case 33.*—The Bradford: Mr. Meade.—A woman, aged 56, strumous, and very much reduced in health. Amputation on account of diseased knee-joint, of many years' duration. Death on the eighth day. *Case 34.*—The Leicester: Mr. Benfield.—A healthy man, aged 20, admitted on account of compound fracture of the right leg. Gangrene rapidly supervened, and the whole lower extremity and the scrotum became emphysematous. Amputation through the middle of the thigh was performed on the third day. Death followed twelve hours afterwards. At the autopsy air was found in the cellular tissue of the body generally, and even in the liver. *Case 35.*—The Liverpool: Mr. Bickersteth.—A cachectic woman, aged 40, admitted on account of a large tumour on the upper part of the left knee. The tumour was of two years' duration, and had been very painful. The tibia and fibula were fixed, and pushed backwards and outwards. After amputation the disease proved to be medullary cancer, springing from the head of the tibia. Death from pyæmia occurred on the twentieth day. No autopsy was permitted, but in the stump the whole length of the bone was found denuded of periosteum and bathed in pus; the femoral vein also contained pus. *Case 36.* The North Staffordshire: Mr. Turner.—A boy, aged 11, admitted on account of compound fracture of the thigh. He had been brought six miles, and had lost much blood. Immediate amputation just below the great trochanter. Death from collapse four hours afterwards. *Case 37.*—The Dundee: Dr. Crockatt.—A girl, aged 12, under care on account of malignant disease of the lower third of the femur, involving the knee-joint. The tumour had been noticed three months before admission. Amputation through the middle third of the thigh. Death on the seventh day. *Case 38.*—The Sussex County: Mr. Blaker.—A very feeble woman, aged 50. Amputation on account of diseased knee-joint, of nineteen months' duration. Death from phlebitis, etc., on the eighth day. Secondary deposits in the lungs.

Of the Leg.—*Case 39.*—The Bradford: Mr. Poppleton.—A strumous girl, aged 11, in very feeble health. Amputation in the lower third on account of diseased ankle. Recovered. *Case 40.*—The Gloucester: Mr. Wood.—An engine-driver, aged 26, whose foot and ankle had been crushed in a railway accident. Primary amputation in the lower third. He had two attacks of secondary hæmorrhage, and part of the tibia

exfoliated. Recovered. *Case 41.*—The North Staffordshire: Mr. Garner.—A healthy old man, aged 72. Primary amputation on account of compound fracture. He had sustained also simple fracture of the other leg. Recovered. *Case 42.*—The North Staffordshire: Mr. Turner.—A phthisical man, aged 41.—Amputation in the lower third on account of carious disease of the tarsal bones. *Case 43.*—The North Staffordshire: Mr. Garner.—A man, aged 27, in good health. Primary amputation on account of compound fracture. Recovered. *Case 44.*—The Cheltenham: Mr. Eves.—A man, aged 45, the subject of diseased tarsus and ankle. Amputation. Recovery. *Case 45.*—The Hull: Mr. Craven.—A healthy lad, aged 19. Primary amputation on account of crushed foot. Recovery. *Case 46.*—The Bradford: Mr. Meade.—A man, aged 55, the subject of strumous disease of the ankle-joint of eighteen months' duration. Amputation in the upper third. Recovery. *Case 47.*—The Bradford: Mr. Meade.—A man, aged 22, strumous and in bad health. Amputation in the lower third on account of diseased ankle-joint. Recovery. *Case 48.*—The Bradford: Mr. Parkinson.—A strumous man, aged 21, the subject for three years of disease of the ankle-joint. Amputation in the upper third. Recovery. *Case 49.*—The Bradford: Mr. Poppleton.—A healthy man, aged 26. Primary amputation on account of compound fracture. Recovered. *Case 50.*—The Durham: Mr. Stoker. This case is No. 17 in our last report. The right thigh had then been amputated (primary). A comminuted fracture of the left leg into the ankle-joint had also been sustained. Necrosis of the tibia followed, and the man was so much reduced that it was necessary to amputate this leg also six months after the accident. Recovery. *Case 51.*—The York: Mr. Husband.—A woman, aged 21, in delicate health, the subject of diseased ankle-joint. Amputation in the lower third. Recovery. *Case 52.*—The York: Mr. Hey.—A man, aged 50, in poor health. Amputation on account of fungoid disease of the tarsus, which had existed several years. Recovery. *Case 53.*—The York: Mr. Husband.—A lad, aged 18, in poor health, the subject of diseased tibia. Necrosed bone had been removed on two occasions, but the limb appearing likely to be useless, amputation just below the knee was performed. Recovered. *Case 54.*—The York: Mr. Hey.—A boy, aged 14, in good health. Primary amputation on account of compound fracture. Under treatment. *Case 55.*—The North Staffordshire: Mr. Garner.—A boy, aged 14. Secondary amputation of the leg, on account of gangrene after compound fracture. *Case 56.*—The Sussex County: Mr. Furner.—A man, aged 37. Amputation below the knee, on account of suppuration in the ankle-joint following a severe crush of the foot. The operation was performed two weeks after the accident. Recovery. *Case 57.*—The Sussex County: Mr. Lowdell.—A man, aged 23, under care on account of scrofulous disorganization of the ankle-joint. Good recovery. *Case 58.*—The Sussex County: Mr. Blaker.—A boy, aged 12, in good health. Primary amputation on account of a crush from having his foot caught in the wheels of a threshing machine. Good recovery. *Case 59.*—The North Staffordshire: Mr. Garner.—A man, aged 22, in good health. Primary amputation on account of compound fracture. Recovery. *Case 60.*—The Bradford: Mr. Meade.—A man, aged 47, of strumous habit. Amputation in lower third, on account of diseased tarsal bones, of nearly three years' duration. Recovery. *Case 61.*—The Derby: Mr. Fearn.—A farmer's boy, aged 15; admitted on account of ankylosis of the right knee, at an acute angle, and atrophy of the leg. Amputation below the knee. Good recovery. *Case 62.*—The Derby: Mr. Johnson.—A railway guard, aged 38; admitted on account of his right foot having been crushed in a railway accident. Primary amputation in the middle third. Erysipelas followed, and exfoliation of the end of the tibia resulted. Recovery. *Case 63.*—The Royal Berks: Mr. Moxhay.—A feeble man, aged 56, the subject of chronic bronchitis, was admitted on account of long standing and hopeless disease of the tarsus. After several months' treatment, in order to improve his health, amputation below the knee was performed. Profuse secondary hæmorrhage on the thirteenth day. Recovery. *Case 64.*—The Leeds: Mr. Teale.—A delicate man, aged 45, the subject of old-standing disease of the tarsus. Amputation. Recovery. *Case 65.*—The South Staffordshire: Mr. Sandford.—A pale unhealthy man, aged 65. Amputation on account of diseased ankle-joint and ulcer of the leg. Recovery. *Case 66.*—The Derby: Mr. Gisborne.—A healthy boy, aged 5. Primary

amputation on account of crushed foot. Recovery. Case 67.—The Derby: Mr. Gisborne.—A healthy woman, aged 34, the subject of contracted knee, and diseased tarsus. Amputation in the upper third of the leg. Recovery. Case 68.—The Derby: Mr. Johnson.—A feeble woman, aged 50. Amputation on account of diseased tarsus following an injury 10 months before. Recovery. Case 69.—The Derby: Mr. Johnson.—A woman, aged 25. Amputation in the lower third of the leg, on account of diseased ankle of 8 years' duration. Recovery. Case 70.—The Leeds: Mr. Teale.—A strong healthy man, aged 24. Primary amputation on account of crushed foot. Recovery. Case 71.—The Leeds: Mr. Teale.—A delicate boy, aged 15, for 2 months the subject of acute inflammation of the tarsus. Amputation. Recovery. Case 72.—The Nottingham: Mr. Thomas Wright.—A collier, aged 34. Primary amputation on account of compound fracture. (Railway accident.) Part of one flap sloughed. Recovery. Case 73.—The Nottingham: Mr. Wright.—A railway guard, in good health, aged 35. Primary amputation on account of crushed ankle. (Railway accident.) Recovery. Case 74.—The Nottingham: Mr. T. Wright.—A healthy boy, aged 14. Secondary amputation on account of gangrene of the foot following severe contusion. Recovery. Case 75.—The South Staffordshire: Mr. Mac Munn.—A healthy lad, aged 20. Primary amputation on account of compound comminuted fracture. Recovery. Case 76.—The Liverpool Royal: Mr. Long.—A healthy man, aged 21, a bargeman. Primary amputation on account of compound fracture; erysipelas. Recovery. Case 77.—The Leicester: Mr. Macaulay.—A healthy lad, aged 17. Primary amputation on account of severe laceration of the leg. Recovery. Case 78.—The Staffordshire General: Dr. Masfen.—A boy, aged 12, had had his leg cut off at the ankle by a reaping machine. Primary amputation just below the knee. Recovery. Case 79.—The Staffordshire General: Dr. Masfen.—A feeble man, aged 49, the subject of ulcer of the leg involving the tibia; very painful, and resisting treatment. Amputation at his own request. Recovery. Case 80.—The West Norfolk: Mr. Kendal.—A boy, aged 16, much reduced by acute inflammation of the tarsus and ankle. The disease had existed about four months. Amputation. Recovery. Case 81.—The Cheltenham: Dr. Eves.—A man, aged 45. Amputation on account of chronic disease of the tarsal bones. Recovery. Case 82.—The Bradford: Mr. Poppleton.—A healthy man, aged 69, was admitted on account of compound fracture of the leg. An attempt was made to save the limb, but gangrene coming on, amputation was performed on the 12th day. Under treatment. Case 83.—The Royal Berks: Mr. May.—A cachectic man, aged 46, the subject of diseased ankle. The stump was doing well until five weeks after the operation, when double pneumonia in a low form came on, and death occurred ten days afterwards. Case 84.—The North Staffordshire: Mr. Ball.—A man, aged 47. Primary amputation on account of compound fracture. Death on the tenth day. Case 85.—The Hull: Dr. Lunn.—A man in bad health, aged 36. Primary amputation on account of compound fracture of the ankle with severe contusion. Secondary hæmorrhage on the 16th day occurred, but not to a very serious extent. He had been sinking gradually, and death occurred on the 18th day. Case 86.—The Gloucester: Mr. Wilton.—A very unhealthy man, aged 58, the subject of diseased ankle-joint, of 11 months' standing. Death on the second day after the operation. Miliary tubercles were found in the lungs. Case 87.—The Hull: Mr. Craven.—A delicate woman, aged 30. Amputation on account of disease of the ankle-joint and tarsal bones. Hemorrhage occurred in the evening, but not to very serious amount. She sank gradually, and died on the 18th day. Case 88.—The Liverpool Royal: Mr. Long.—A feeble man, aged 79, amputation in the upper third of the leg, on account of a very painful epithelial cancer of the heel. The femoral glands were enlarged. Death from exhaustion in the third week. Case 89.—The South Staffordshire: Mr. Mac Munn.—A collier, aged 26, was admitted with a severe compound fracture, involving the ankle-joint. An attempt was made to save the limb, but profuse suppuration followed, and the patient's strength failed. Secondary amputation just below the knee. Death from exhaustion on the third day. Case 90.—The Nottingham: Mr. Wright.—A railway guard, aged 22. Primary amputation on account of crushed leg. (Railway accident.) Death from pleurisy on the 15th day. Case 91.—

The Dundee: Dr. Crockatt.—A sailor, of very intemperate habits, aged 58. Primary amputation on account of crushed leg. He did not rally after the operation. Death. Case 92.—The Sussex: Mr. Blaker.—A man, aged 59, the subject for twenty years of a very extensive and intractable ulcer of the leg. Amputation at his own earnest solicitation. All went on well till the sixth day, when symptoms of pyæmia occurred, and death followed on the tenth. The veins of the leg and thigh were found inflamed, and there were secondary deposits in various organs. Case 93.—The Royal Berks: Mr. May.—An unhealthy boy, aged 11, admitted with a severe laceration of the foot. Secondary amputation three weeks afterwards was performed on account of sloughing, etc. Rigors and pyæmic symptoms followed two days after the operation, and death occurred on the fifth day. No autopsy.

NOTE.—Some misapprehension having existed in respect to the cases given without names, in supposing that they had occurred at the Hospital the name of which was given with the one immediately preceding, we have been requested to state that such is not the case. For instance, in the fatal cases of Lithotomy given last week, and in those of Herniotomy this week, we have thought it best, in order to encourage candour in the communication of details, to publish no names, either of Hospital or of Surgeon. These are all placed together, according to our usual custom, last in the list; and we trust it will be apparent to all readers that it is not intended to imply that they occurred under the care of the Surgeon to the case immediately preceding. The omission of the name is simply intended to preserve the *incognito*, and for no other purpose.

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Medical Times & Gazette.

SATURDAY, MARCH 7.

THE THREATENED MURRAIN.

So long ago as the 12th of June, 1856, Lord Clarendon transmitted to the Secretary of the Royal Agricultural Society a copy of a despatch from Colonel Hodges, our Consul-General at Hamburg, and a second report from Mr. Blackwell, our Vice-Consul at Lübeck, containing information respecting a contagious disease that had broken out among the cattle in Mecklenburg. Mr. Blackwell says, "I am impressed with the conviction that the measures adopted to prevent the introduction of this fatal disease or murrain into a given country cannot be too stringent or too vigorously enforced." In a notification issued by the Lübeck Government the murrain is termed *Lungenseuche*, or pulmonary murrain. Two kinds of murrain are described in German veterinary works, equally contagious and almost equally fatal, so that for all practical purposes of prevention they may be considered as identical. The first variety, or *Steppe Murrain*, has been endemic in the steppes of Siberia and Tartary since the middle of the last century. It has on different occasions become epidemic, spread to Hungary and Poland, and from thence to Germany and Central Europe. During the

last century it is calculated that this disease carried off *two hundred millions* of horned cattle. In the Duchies of Schleswig and Holstein alone 150,000 head of cattle were lost between 1774 and 1781. In 1813 it again broke out in these duchies, but Mr. Blackwell says it was "speedily checked and eradicated by the stringent measures and police regulations adopted by the Danish Government." The disease was introduced into this country in 1745, and as Lord Naas said in the House of Commons, it lasted eight years, and carried off "enormous quantities of cattle." Our herds have increased greatly during the past century, and should the disease be introduced now, we can hardly hope to escape without a much greater loss than before. The symptoms described at length are those of a peculiar form of fever, ushered in by a period of depression of seven days' duration, rigors and excitement on the eighth day; on the ninth and tenth days an eruption of pustules in the mouth, nostrils, and between the clefts of the hoofs, followed by nodules and pustules on the hide, and a mangey eruption. Then comes laboured respiration, choleraic diarrhoea and death; or should recovery take place, there is profuse purulent discharge from the pustules. No remedy has appeared to have been of much use. All writers regard the disease as "in the highest degree contagious," says Mr. Blackwell. It only affects horned cattle. The mortality in the steppes is 50 per cent., in Germany from 80 to 90 per cent. The other form of disease, or *Pulmonary murrain*, appears to be very similar, except that induration of the lungs is the chief anatomical character. It is considered fully as contagious as the Steppe murrain.

It is proved then that last June the Government knew that this fearful epidemic was approaching. They were told what great danger there was that it would be imported from Hamburg. The steps they took were so wonderfully active, that when a vessel arrived with a suspicious cargo, one calf was really killed! Looking to the probability therefore that the disease has been by this time introduced into this country, it remains to be considered how its progress is to be checked. The medical authority at the Board of Health is dumb. Let us then impress upon our farmers the necessity of immediately slaughtering all cattle attacked by the premonitory symptoms of this disease. Whether they die or be slaughtered, their flesh and excrements should either be burnt or buried in a deep pit, and covered with quick lime. The clothes of all attendants should be scalded or heated in hot ovens, and the cow-houses or stalls purified by thorough cleansing and whitewashing. In the meantime, in the hope that we have hitherto escaped, the most stringent precautions should be adopted at Hamburg to prevent the exportation of diseased cattle; and all cattle arriving from suspected districts should be kept at least fourteen days under a quarantine of observation near the port of arrival before they are permitted to go at large. When our Profession have power at the Board of Health we may expect to see some such common-sense precautions as these adopted in time to prevent mischief. It is not too much to say that if the disease be introduced into this country, the Government, the Board of Health, and the Customs are alone responsible. They were warned in time, and they have killed a calf!

THE WEEK.

ANOTHER case of suspected poisoning by "locust nuts," or "Egyptian beans," has been the subject of an inquest held at Bolton. A boy, ten years old, died after a sudden attack of vomiting and purging, he having eaten a quantity of the nuts the day before he was taken ill. Marks of extensive gastritis and enteritis were found after death; and Dr. Chadwick deposed as follows:—"I cannot account for the extensive inflammation of the stomach and bowels from any natural

cause. I apprehend it is not likely such inflammation could have been there from natural causes, in the case of a person being taken ill at four o'clock in the morning, and dying at eight the same evening. I cannot attribute death to anything but to the administration of some irritant or acrid poisonous substance. I am the more inclined to this opinion, inasmuch as it is generally admitted that acute or primary inflammation of the stomach is seldom or ever found in adults excepting as the result of an irritant or acrid substance; in children, however, it is sometimes found to be present, without the administration of such matters. The vegetable now produced (one of the beans in question) is called honey locust, and is extensively sold in the market. I find that these locusts have been very generally used. Many people have eaten them with impunity. In two or three instances, however, I have heard of persons being indisposed after partaking of them, while others in the same family, who have also eaten them, have experienced no unpleasant effects; but there are idiosyncrasies, or individual peculiarities, wherein even ordinary food produces distressing and unpleasant effects." [A juror here remarked that one of his children had been exceedingly unwell after eating these locusts.] Dr. Chadwick continued: "For the purpose of ascertaining their effects, I have tried them on five rabbits furnished by Mr. Harris, superintendent of police. I first selected three of them for experiment. To one I gave 12 drachms of the hard seeds in a powdered state, mixed with food, and then to the same rabbit four ounces of the pods, bruised. The whole of this was taken in forty-eight hours. To the second rabbit I gave six ounces of the pods, without the seeds; to the third, nearly eight ounces, including both rind, pulp, and seeds. To the fourth and fifth about the same quantity of the whole pods together. The rabbits were not at all affected by this food. I killed the third rabbit to-day at noon. I examined very carefully its stomach and intestines, both externally and internally, but could discover no traces of redness or inflammatory action, nor of any disease." Mr. Watson, a chemist, could not detect a trace of antimony, arsenic, or any mineral poison, or oxalic acid. The Coroner told the jury they must be guided mainly and materially by the evidence of Dr. Chadwick and by that of Mr. Watson, who had failed to discover anything of a poisonous nature in the body of the deceased. He recommended them to return an open verdict, and expressed his opinion that the appearances in the body had been caused by something more than locusts. The jury adopted the recommendation of the Coroner, and returned the following verdict:—"That the deceased, John Dunn, died on the 21st instant, from inflammation of the stomach and intestines, caused by some irritant or acrid poison." It may be remembered that, at the London inquest we noticed last week, nothing of a poisonous nature was found on examination of the nuts.

A very useful practical paper on the Ophthalmoscope was read by Mr. Jabez Hogg at the Medical Society of London, on the 28th ult., the chief point of interest seemed to be the great improvement which has ensued in our knowledge of eye diseases since the employment of this instrument. The speakers who took part in the debate which followed the reading of the paper were Mr. Haynes Walton, Mr. Canton, Mr. Power (of the Westminster Ophthalmic Hospital), Mr. H. Thompson, and Mr. De Méric; and these gentlemen offered somewhat conflicting testimony as to the advantages of the ophthalmoscope, more especially in eyes which are very sensitive to light. In a preliminary sketch of the history of the ophthalmoscope, it was shown in Mr. Jabez Hogg's paper that this instrument is not altogether due, as is usually believed, to the ingenuity of the Germans, but that the idea of its in-

vention originated in the mind of an English surgeon, Mr. William Cumming, who, in the year 1846, read a paper before the Medico-Chirurgical Society upon the best mode of examining the interior of the eye, and detecting the changes occurring in the retina and posterior parts. Mr. Cumming considered that his instrument could be used with more advantage when the pupil was previously dilated by atropine; but in opposition to this view, Mr. Jabez Hogg condemned the use of atropine, as he believed that all the discrepancy of opinion regarding the appearances observed by ophthalmoscopists have resulted from the use of this drug; and that if the light is properly managed, its use may be dispensed with in nearly all cases, except those which are wholly or partially combined with immobility of the iris, or when there is closed pupil. Mr. Hogg had found the instrument invaluable both in hospital and in private practice.

In his concluding lecture, delivered at the College of Physicians on the subject of Diabetes, Dr. Garrod, in advocating the superiority of dietetic over any other treatment in this disease, spoke very favourably of the effects of the bran-bread which has been described by a member of our Profession, Mr. Camplin, and prepared, under his direction, for use in some of our hospitals. This bread is made of bran, which ought to be very finely ground, mixed with butter, eggs, and milk, and leavened by hydrochloric acid and carbonate of soda. In this form it constitutes a light cake, of a brown colour, something like gingerbread in appearance, and is by no means unpalatable. In the same lecture, Dr. Garrod, advertng to the supposed efficacy of Vichy water in the treatment of diabetes, observed that, in his own experience, he had found no decided benefit from its use; and he also stated that the Vichy water sold in London contained only bicarbonate of soda, all the other ingredients being carefully excluded.

The results of the ministerial defeat on the Chinese question are of some importance in their bearing upon the profession. The Medical Reform Bill will, of course, be deferred *sine die*. The bill to renew the Board of Health must at least be delayed. But the chief point is that a new parliament will very soon be elected, and we trust not a moment will be lost in taking steps to secure the return of some members of the medical profession to parliament. Many of our readers are gentlemen of extensive local influence in various cities and boroughs, and we trust they will exert that influence to procure the nomination of candidates who will address the legislature with authority on all matters of public health and State medicine, and support the just rights and demands of medical men upon the government.

Dr. Laycock must be a great favourite with the Edinburgh students. An attempt to "dissect" him has led to a town riot, and a battle royal between the public and the mob, while a bonfire on the Calton-hill was made of copies of newspapers which supported the party of the would-be "dissectors." It appears that in two lectures on the "Physiology of Drunkenness, its Causes and Remedies," Dr. Laycock opposed the system of legal suppression, and expressed very strongly his preference for moral persuasion. This was not at all palatable to the "Maine law" party, and a lecture was advertised by Dr. Lees, the placards being headed, "Dr. Laycock dissected." However, the students decidedly objected to the dissection of their professor, and, says the *Times*, when the evening arrived it was found that the hall was completely packed by the students. A most tumultuous, uproarious, and amusing scene ensued. The chairman, lecturer, and mem-

bers of the board entered amid tremendous hooting, and the uproar was continued without cessation, a bell being rung to stimulate it whenever any symptom of abatement was shown. The chairman essayed often, but in vain, to address the meeting. Shouts of derision, choruses of triumph, and peals of laughter answered every attempt, and the would-be speaker sat down in dismay. Various persons in the hall tried to intercede, and even an elderly lady stood up on her seat, and was seen, but not heard to expostulate. As a crowning piece of ridicule a bottle and glass were produced in the front gallery, and convivial nods of "Here's to you" tantalized the sober gentlemen on the platform. Mr. Edwards, demonstrator of anatomy, tried to quell the hubbub, but in vain. He besought them to hear Dr. M'Culloch, but the only answer was, "Take out your scalpel and dissect him." The proposed lecturer then handed a note to the reporters, that he "positively declined" to deliver his address that evening, and followed up his superfluous resolution by taking his departure. The chairman and committee, however, sat half an hour longer, in all an hour and a half, the "mirth and fun" still running "fast and furious." At 10 o'clock he left the chair, and the meeting dispersed. The students then marshaled outside, and proceeded to Dr. Laycock's house, their noisy enthusiasm bringing the doctor to the balcony, and eliciting words of thanks for their sympathy and pacific counsel. Then followed the bonfire, the mob, the charge of police, broken windows, volleys of stones, deputations to the Lord Provost, and the other incidents of a "town and gown" collision, quite refreshing in these days of languor and propriety.

The Guardians of the Banbury Union have just acquired for themselves the same kind of discreditable notoriety which has fallen to the lot of several other local administrators of the Poor-law. Mr. Richard Grimby, who has held for eighteen years the situation of Medical officer to the Banbury Union, has been at last compelled to appeal to the Guardians to increase the miserable pittance which has been doled out to him for his professional services. The justice of his demand will be readily appreciated, when we state that, during the year ending at Michaelmas last, he was called upon to attend 1669 cases of illness and accident, including midwifery cases and surgical operations, and also to provide medicines, leeches, and surgical appliances, besides keeping an assistant and a horse, for the munificent sum of £102 16s. ! This sum gives an average of 1s. 2½d. per case; and it might have been imagined that the most niggardly economist would have considered the payment as utterly inadequate; but the Banbury Guardians evidently thought the remuneration ample, for they not only refused to increase it, but trumped up, or, at all events, entertained a frivolous and most unfounded charge against Mr. Grimby of inattention to a sick patient—a charge which immediately fell to the ground from its utter weakness. This system of injustice and persecution, if it was intended to drive Mr. Grimby from his office, appears to have had the desired effect, for that gentleman has resigned his situation in disgust. But it is gratifying to find that he has received from his fellow-practitioners in the town a most cordial testimony of esteem and sympathy, expressing the sense entertained by his professional brethren of the injustice to which he has fallen a victim, and their entire repudiation of the false and frivolous charge made against him. It is also most satisfactory to learn that every Medical man in the town considers the conduct of the Guardians most disgraceful, and is pledged not to apply for the vacant appointment. This is an admirable example to set to other Unions, and we hope that it will be followed throughout the country. If all Medical men were actuated by the sam

honourable feelings as those which characterize the Profession in Banbury, Poor-law oppression of Medical men would soon come to an end.

One of the features of interest in the case of death from chloroform, which we regret to have to record this week, is the early age of the patient. Considering the large number of operations performed on children, and the almost invariable employment of anæsthetics, the proportion of fatal cases amongst them has been much smaller than in adults. Mr. Paget's patient is not by any means the youngest in whom death has resulted. Asehendorf lost an infant of a year old from chloroform given previous to an operation for nævus, and several other deaths have followed the inhalation of chloroform by very young children. A case at Madrid occurred in which the patient was a girl aged 12, and one in America to a girl of 15.

REVIEWS.

Second Memoir on Excision of the Knee-Joint. By RICHARD BUTCHER, Esq., M.R.T.A., Surgeon to Mercers' Hospital, &c. &c. Pp. 76. Dublin: 1857.

Just two years ago Mr. Butcher took the opportunity, whilst publishing a most successful case of excision of the knee-joint, of recording at length the whole of the cases in which this operation was known to have been performed in Great Britain. The knowledge thus imparted to the profession was of great value, and there cannot be a doubt that many surgeons were induced, by the evidence afforded in Mr. Butcher's essay, to adopt the operation of excision rather than amputation of the thigh. It appears that within the two last years no less than fifty-one excisions of the knee-joint have been performed by various surgeons in the empire; and Mr. Butcher has given the details of these various operations, with their results, in this second memoir, which is the reprint of an article from the "Dublin Quarterly Journal of Medical Science."

The author seems to have taken great pains in collecting together the details of the various cases; he has accomplished his work in a manner the most satisfactory and reliable; and the information which he has furnished will be accepted as a boon by all those surgeons who are anxious for the advancement of their art. By referring to the author's original memoir we find that thirty-one operations are detailed there, whilst fifty-one are reported here. So that the whole number of excisions of the knee-joint since its revival have been *eighty-two*. Of this number *fifteen* are reported to have died; whilst in *eight* instances amputation was performed subsequently, one case ending in death. In the *fifty-one* cases recorded in the present memoir the deaths are *ten*. The chief operators are Jones of Jersey, Fergusson, Humphrey of Cambridge, Erichsen, Keith, Page and Price, each of these surgeons having had several cases: Fergusson, who revived the operation, and Jones, who followed quickly in his footsteps, having each had ten operations.

Mr. Butcher has analysed the results of the given cases in a most able and satisfactory manner, and his remarks will be read with the greatest interest. He is not sparing of criticism upon some of the operators whose cases turned out badly, either dying or requiring amputation; and, although his remarks are sometimes too severe, he very properly calls attention to the sad results which will ensue if proper care is not taken in the after-management of these cases, and his observations on the necessity of *putting up* the limb at once are very judicious.

It is impossible to deny the importance of adjusting the limb in a suitable apparatus, in which it may be kept immovable, immediately after the operation; and the details of some of the cases given by Mr. Butcher, where death took place or amputation was required, show that these results were mainly due to the Surgeon not keeping the limb properly secured in a fitting apparatus.

While we cordially recommend the perusal of this Memoir to every Surgeon, and admit most fully that the thanks of the Profession are due to Mr. Butcher for his efforts in the good

cause of Conservative Surgery, we must protest against the very unfair manner in which he contrasts the results of excision and amputation. He takes the statistics of *one* London Hospital for *one year* as his standard of comparison as to the fatality of the two operations, and this when the results of the practice of all the London Hospitals for upwards of three years are accessible to him in the pages of this Journal.

A Report upon some of the more important Points connected with the Treatment of Syphilis. By HOLMES COOTE, F.R.C.S., Assistant-Surgeon to St. Bartholomew's Hospital. London: 1857. 8vo, pp. 141.

Mr. Coote does not look upon venereal diseases as interminable in their results, as some would make us believe, passing from generation to generation, "blighting the growth, and being the parent of an endless variety of ailments." He thinks the poison "in general wears itself out, except in the very severe cases;" and that "the transmission of syphilis from parent to offspring is comparatively uncommon." He endeavours to prove that "syphilitic sores owe their distinctive characters to the action of the poison on particular tissues; that there is but one poison, which may produce any of the varieties of secondary or constitutional symptoms; and that the occurrence of bubo, whether suppurating or not, has no influence upon the constitutional effects."

The work is divided into eight chapters, the first introductory, and those following on blennorrhagia and gonorrhœa, primary syphilis, inflammation affecting syphilitic sores, diseases resembling syphilis, secondary symptoms, tertiary syphilis, and infantile syphilis. Upon all these points Mr. Coote speaks with the authority due to very extensive experience, and gives many practical hints well worthy of record.

BOOK NEWS.

Dr. Noad has presented to the public the Second Part of his *Manual of Electricity*, which is now going through its fourth edition. The part now published is devoted to the subjects of magnetism and the magnetic telegraph, which are clearly explained and illustrated by an abundance of well-executed engravings.—In a small work of about a hundred pages, Von Siebold, Professor of Comparative Anatomy and Zoology in the University of Munich, has published an Essay on a *True Parthenogenesis in Moths and Bees*, being a contribution to the history of reproduction in animals. In this very learned and ingenious monograph, Von Siebold attempts to show that the term Parthenogenesis has been improperly applied to the reproductive process in such creatures as the Aphids, which rather exhibit instances of the alternation of generations as described by Steinstrupp, but that it is strictly applicable to the occasional reproduction of certain lepidopterous insects, and of bees and silk-worms. The reasonings and the observations recorded are of too abstruse a character to enable us to notice them at length, nor are we wholly convinced that Von Siebold has quite established his peculiar theories; but as a contribution upon a very important and highly suggestive department of natural history, the work may be warmly recommended to the attention of physiological inquirers. The chapter on the reproduction of the bee is especially full of interest and novelty.—Dr. Cleveland's *Essay on the Mechanism of the Gubernaculum Testis* is the prize thesis of the author in the University of Edinburgh. It displays great knowledge of the literature of the subject, and contains the details of seven original dissections.—Mr. Richard Barwell has published a small volume on the *Care of the Sick*, being a course of practical lectures delivered at the Working Women's College in Red Lion-square. In these lectures, Mr. Barwell does not pretend to teach his fair hearers to be physicians and surgeons, but to be good nurses; and he accordingly gives a number of plain directions for their guidance in attending upon the sick who are under Medical treatment. The application of bandages and of leeches, the importance of ventilation and cleanliness, the preparation of the common articles of sick diet, the treatment of slight cuts and chilblains, are among the subjects treated, and the contents of the volume will repay perusal. In the concluding part of the last lecture, a wholesome denunciation is levelled against quackery in general, and homœopathy in particular.—In a volume on the *Pathology, Symptoms, and Treatment of Ulcer of the Stomach*, Dr. Brinton has collected together the subject-matter of various papers published in the

pages of some of our contemporaries, together with such alterations and additions as are required in a continuous treatise. Dr. Brinton has treated of this not very uncommon affection with great ability, and he has drawn his conclusions from the results of his own observations, as well as from those recorded in the annals of Medical literature. Dr. Brinton lays down the rules for forming a diagnosis of this affection, and shows that it is often amenable to treatment. The subject of Ulcer of the Stomach is one of great difficulty, and it has received considerable elucidation by Dr. Brinton's able researches.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

DISCUSSION AT THE PARIS ACADEMY OF MEDICINE.

UPON THE

TREATMENT OF OVARIAN CYSTS.

M. Huguier.—At what age do those women who are left to themselves usually die, and to what accidents are they exposed? The cases are divisible into two categories; 1. Women who become the subjects of the disease after 45 or 50; in whom the menstrual *molimen* no longer exists, and sexual desires no longer remain, and whose generative power is terminated. In such the progress of the disease may be very slow, and the inconveniences inconsiderable; and the surgeon must interfere only when absolutely necessary; 2. Women who suffer from the disease towards the age of 20 to 40 or less. They seldom live long, usually dying between 30 and 40; and the younger they are when attacked the less are the chances in their favour. They are liable to a thousand inconveniences and functional disturbances, to sterility and varied suffering. Moreover, alarming accidents may result from inflammatory action. Premature death is induced by slow asphyxia, due to the damage done to the assimilatory powers, or it is the result of inflammatory action. Which are the cases which call for interference? However careful the diagnosis may be, numerous cystoid collections formed in the vicinity of the ovary are liable to be confounded at the bedside with cysts of that organ. Numerous researches enable M. Huguier to enumerate the following:—1. Serous cysts of the broad ligaments; 2. Embryonic cysts of these ligaments arising from arrested extra-uterine gestation; 3. Cysts developed either beneath the fibro-cellular membrane surrounding the uterus, or within its substance; 4. Cysts of the Wolffian body; and 5. Certain circumscribed and encysted dropsies of the pelvic peritonæum, which in some cases present the greatest analogy to certain forms of ovarian dropsy. All these cysts, which in their organisation resemble serous and cellulo-vascular membranes, are easily obliterated by surgical procedure. In ovarian cysts, properly so called, we must, too, distinguish five varieties:—1. Those developed in the Graafian bodies, which are unfortunately the most frequent, for, resembling mucous membrane in their organization, they are the most difficult of cure. They are lined with a vascular villous membrane, which is itself covered by a more or less thick layer of epithelium opposing the action of medicinal substances. These usually constitute the multilocular form of cyst; 2. Those which are developed in the cellular substance uniting the vesicles of the ovary together, the cysts which result being true serous or sero-sanguineous cysts; 3. Hydated cysts; 4. Chronic purulent cysts; and 5. Embryonary cysts with cellulo-vascular walls. These four last varieties are easily cured by iodine injections, sometimes combined, as in the embryonary cyst, with slight *débridement*. As at the bedside it is usually impossible to say to which of these varieties the case belongs the too general proscription of surgical interference will condemn a great number of women to misery and death who might otherwise have been saved.

Which are the cases forbidding an operation? We should avoid as far as possible meddling with—1. Cysts developed about the fiftieth year, and *a fortiori* in older women, although women of more than sixty years of age have been successfully operated upon. 2. Those which, though occurring in much younger women, do not make much progress or

give rise to important functional disturbance. 3. Multiple, areolar, or multilocular cysts, especially when of large size. Mischief usually results from interference in such cases. Death does not generally take place from peritonitis, but from purulent infection, and the gradual exhaustion of the patient, the results of the gangrenous and other changes taking place in the walls of the cysts. 4. Very voluminous cysts, which have contracted large adhesions with the upper viscera and walls of the abdomen, impeding the retraction and obliteration of the cyst. And 5. Cysts which occur in very feeble subjects, or suffering from constitutional disease, or when there is also organic disease of the uterus or ovary.

Which are the cases calling for interference? 1. All cysts occurring in young women, which cause serious inconvenience and accidents. These are of more common occurrence than is generally supposed. 2. Cysts which, although they have not yet given rise to accidents, are of a rapid and constant increase, and therefore ere long cannot fail to give rise to such. If we wait until the cyst has reached a very large size, our means act with less efficacy, and we expose the woman to dangers that might have been avoided. M. Huguier agrees with Trousseau and Jobert in recommending the cyst to be operated upon when it does not exceed the size of a child's head. 3. All cysts which being in the above conditions do not appear very thick or irregular, or very adherent, and the contents of which seem light and mobile. 4. We should tap and inject iodine into all cysts which, as a consequence of one or more indispensable simple punctures, have inflamed and suppurated, in order to prevent purulent infection.

As to operative procedures, M. Huguier believes that the incision of the cyst and abdominal wall, well-nigh abandoned, may, now we have the aid of iodine, be exceptionally resorted to. In three cases in which incision per vaginam was resorted to for the discharge of piliferous or embryonary cysts, recovery took place. He has never seen tapping, when properly performed, give rise to accident, but he advocates it as merely preliminary to the injection of iodine. Leaving in the canula is only proper when there is suppuration of the cyst, or when multilocular have been opened by mistake for unilocular cysts. Facts are now abundantly numerous to demonstrate the efficacy of iodine. Of nine cases which have occurred to himself, one has died; in another there was bad peritonitis, with recovery; in two there was relapse, while the other five recovered.

M. Robert observed, that simple as is the operation of tapping, the greatest care should be taken to prevent any of the fluid escaping into the peritoneum. To this end constant pressure should be kept up during the operation, and maintained afterwards by a bandage, the patient remaining absolutely at rest during several days. In spite of all precaution, there will sometimes in a few hours arise severe pain around the site of the puncture, but this usually yields to leeching and simple treatment. It indicates a partial peritonitis, the consequence of which is the formation of adhesions between the cyst and walls of the abdomen, which, in the case of future tapplings being required, may add to the security. Simple puncture with the evacuation of the fluid, in some cases suffices to obtain a cure, an instance of which has occurred to M. Robert himself. In all the cases he has witnessed in which the wound has been left open, whether iodine injections have been employed or not, the patients have died sooner or later, either from purulent infection or exhaustion. According to his experience with iodine injections they do not usually induce much inflammation of the walls of the cyst; but a dangerous peritonitis may be produced by the escape of a portion of the contents of the sac mingled with the iodine. He has always been able to prevent this by keeping the anterior wall of the abdomen exactly applied to the cyst by suitable compression. It causes irritation to endeavour to force out all the fluid by repeated pressure, the portion of the iodine which is left in becoming absorbed. In the six cases he has treated, (in two of which there has been relapse,) M. Robert has met with no serious accident, the inflammation being moderate, and not increasing in proportion to the size of the cyst. Even when success is to follow, the effusion is reproduced for a time, but not to the same extent, and after a while disappears. The process of absorption is, however, a very slow one, and fluctuation may be long felt. Complete obliteration of the cyst, if it ever does occur, must take place at a very late period, and is not essential to success, for iodine exerts a remarkable power in so modifying the altered surfaces

as to re-establish the equilibrium between exhalation and absorption. M. Hutin has shown this in hydrocele, and M. Robert has observed the same thing in hydrarthrosis of the knee. As to the period of operating, M. Robert is of opinion that the cyst should either have reached a large size, or by its rate of increase exhibit signs of speedily so doing; neither, on the one hand, waiting till this size is enormous, giving rise to great functional disturbance, nor, on the other hand, meddling with it when still small and recent, of slow increase, and exciting little disturbance of the health.

M. Jobert believes that the dependence of the treatment of these cysts upon their pathological characters has been exaggerated, the injections always acting in the same manner upon the lining membrane of all cysts, stimulating it, and leading to the deposition of plastic lymph. In three-fourths of the cases that have come under his own care the affection has manifested itself between the seventeenth and fortieth year. The period for interference has arrived when the tumour can be felt in relief in the vagina, or beneath the parietes of the abdomen; and it is indispensable to prevent its attaining dimensions which exclude the hopes of obliteration. The walls must not have time to become thickened and changed in their nature, and we must act before the woman's powers become exhausted. M. Jobert has now employed the iodine injections in thirty cases; and the result of his experience shows that old, thick, and very large cysts are incurable by this means; and whenever success has attended its employment, the cysts have been of medium size, unilocular, and have not undergone transformation.

M. Cazeaux is of opinion that even when these cysts exceed the size of a child's head the Surgeon's interference should be still exceptional; but that the Physician may sometimes usefully intervene, he considering that Cruveilhier and Troussseau have exaggerated the powerlessness of medicine. He possesses facts which show that by the internal and external use of iodine, by blisters, purgatives, diuretics and other agents, unexpected results have been obtained. Cases which have occurred to Rayer and others leave no doubt in his mind, that in some rare instances absorption may be obtained, especially when the tumour is still of moderate size. Surgical interference is only justifiable when the tumour has reached a large size, and continuing to increase, gives rise to disturbance of important functions, and becomes the seat of severe pain. All acknowledge that the disease left to itself is a dangerous one; but all do not admit how rapidly it may become so, too much stress being laid upon isolated cases of longevity. His own experience upon this point much agrees with that of R. Lee; for of 31 cases he has collected, he has found but 7 of the patients surviving more than 10 years, the mean period for the others being 2 years or $2\frac{1}{2}$ years, dating from the time the tumour became appreciable. Still, this proportion may be somewhat exaggerated, for many fortunate cases of this disease may not have been published; but yet he believes he is within the truth in stating, that when an ovarian cyst, containing 4 or 5 litres of fluid, exhibits a constant tendency to increase, the patient must not count upon more than 4 years of life—little, indeed, when we consider that the majority of these women have not passed their 40th year.

In regard to iodine injections, M. Boinet has communicated to M. Cazeaux 44 cases thus treated, the results of which in many instances he has had the opportunity of verifying. The ages of the women varied from 15 to 68, and age has not seemed to much influence the effects of the injection. Of 21 examples of *unilocular* serous cysts, 19 were cured after one or more injection. Of 2 in which the fluid was sanguinolent a cure took place in 1, and the other relapsed; of 6 purulent cysts, 1 proved fatal, 1 relapsed, and in 4 a cure was effected; 3 hydatid cysts were cured. Thus of 32 cysts, occurring in 30 patients, there were 27 cures, 3 relapses, and 2 deaths; and unilocular serous cysts may be said to offer nearly a certainty of cure. In 2 cysts, however, in which the contents were gelatiniform or albuminous, there was 1 death and 1 cure. The result in *multilocular* cysts was still less favourable, for of 11 patients treated, 6 died, while 5 were regarded as incurable. Adding together 117 cases that have been recorded, in which iodine injections have been employed, we find that no serious accident has resulted from the injection, whatever may be the ultimate result of the cases as regards cure. Indeed if the result of simple tapping, and of the injection, be compared, the former will certainly be found to have oftener determined a fatal cystitis or peritonitis than the

latter; and, moreover, in some cases in which there evidently existed inflammation and suppuration, the iodine has so modified the inner surface of the cyst as to diminish the danger. Of these cases 62 were unilocular, and 48 of them cured, 11 were treated without success and without detriment, and in 4 instances only did the women die. Thus we have 48 women saved, who ten years since would have been certainly devoted to death. Even among the uncured there were few who did not derive some advantage from the employment of the iodine, the future development of the tumour taking place more slowly.

It is only, then, in the case of unilocular cysts, when the contents are very viscous and gelatinous, that the iodine is contra-indicated. Tact and experience teach us that such cysts furnish an undulation, or peculiar kind of fluctuation, imparting a sensation to the hand that is easier to recognise than describe. The diagnosis of multilocular cysts, too, is easy when there are but a small number of cells, the undulations then seeming separated and confined to parts of the tumour. M. Cazeaux is not an advocate for preliminary tapings; for, while numerous facts show that the largest cysts may be evacuated at once and cured by iodine; on the other hand, repeated punctures have several times exerted an injurious effect upon the qualities of the fluid, which, serous and citrine at the first tapping, becomes, after the second or third, markedly purulent. Moreover, even simple tapping has so often been followed by accidents, that it is improper to unnecessarily expose the patient to the risk of their occurrence.

M. Velpeau alluded to the difficulty of establishing the period of duration of this disease; but he believes that in the great majority of cases the women may live six, or even eight years from the time the tumour becomes appreciable; and as in several of them existence may be prolonged without any treatment for fifteen or eighteen years, it would be imprudent to employ means of a dangerous character. Still, as sooner or later the disease becomes fatal, it is evident that on some occasions an operation is called for. As to pharmaceutical treatment, M. Velpeau is convinced that it is sometimes of avail, and that he has in a few cases effected cures by the agency of large blisters and iodine frictions.

As to simple tapping, although he has met with four fatal cases, this has been from among 310 or 312 cases; and he believes the statistics upon this point furnished by the English and German practitioners to be greatly exaggerated. The operation is in fact nowise dangerous except in certain complex cases, and he has found most of the women living for periods of from six to eighteen years after its performance. It may even lead to a radical cure, examples of which he can add to those already on record. One of the greatest inconveniences it may give rise to, as has been shown by M. Pidoux, is the exhaustion it induces; for so large a quantity of fluid (and Velpeau has seen as much as 52 kilogrammes removed) cannot be reproduced within the space of some months without enfeebling the economy; therefore we should not make the evacuation till we are forced to it by the urgency of the symptoms, and we should endeavour to retard the re-accumulation by the employment of compression and resolvent agents, together with suitable internal remedies.

There are now about 130 cases on record in which iodine injections have been employed; and among these there have been 30 deaths and 64 cures, relapse having taken place in the others. To what is so large a mortality as 30 cases in 130 attributable? M. Velpeau does not agree with those who regard the diagnosis in this disease so easy, for there are many cysts that may be confounded with it, some of which may be lined with epithelium prohibitive of adhesive inflammation; while the distinction between the varieties of ovarian cysts themselves is by no means easy, and yet much of the success of the operation depends upon the nature of the fluid they contain. It is, however, an important fact, that the nature of the fluid of a cyst may change from one tapping to another: so that a sanguineous cyst to-day in a fortnight may become a serous one. Hence the possibility, having evacuated the blood, of transforming a hæmatocoele into a hydrocele. Therefore, if on the first tapping we find the contents of the ovarian cyst to be viscous and adhesive, we should by successive tapings endeavour to transform it into a more serous fluid before proceeding to injection. From these thirty fatal cases, at least twenty must be abstracted, as not necessarily dependent upon the iodine treatment, but upon the faulty procedure of leaving the canula in the wound: so that there

only in reality remain ten deaths really due to the operation when properly performed, and which must be considered as a very favourable result.

At a later stage of the discussion, M. Velpeau seems, in the case of iodine injections, to recommend their employment at an earlier period than he had already stated as best suited for palliative tapping. When the cyst attains the size of a child's head, and fills the hypogastrium, he says we should, in general, interfere; and although, when we see the patient at a much later period, we should not decline operating if she anxiously requests it, we should not then persuade her to it. It is not, indeed, so much the size of the tumour as the condition of the walls and of its contents, that furnishes us with indications. He does not even advocate preliminary tapping in even large cysts prior to injection; and, founding his opinion from his experience gained from the injection of hernial sacs, he does not think that the accidental introduction of a little iodine into the peritonæum is of the alarming consequence it is deemed by some to be. We must not be too anxious, also, about discharging the entire contents of the cysts, and if some of the fluid remains, as it does when it is viscous, we have only to use the iodine undiluted. The cure in these cases is not dependent, any more than hydrocele, upon our effecting the contact of the two walls of the sac. Washing out the cyst is of no advantage, while it entails the employment of undue pressure; neither need we fear to leave in the portion of the injected iodine that does not spontaneously issue out. As in hydrocele, after injecting the cyst fills again; but, in a fortnight or more, after the exhalation is arrested, and active absorption succeeds it; and he doubts the propriety of the practice of M. Boinet and others, who recommend repetition of the tapping.

M. Guérin drew attention to what he calls the pathology and therapeutics of the operations, *i.e.* to the various circumstances which may occasion death, and the means of their prevention. From the discussion three important facts may be deduced:—1. In a certain number of cases, more or less immediate death has followed simple palliative tapping in patients who had before undergone the operation, without any accident resulting. 2. Most of those who so die succumb to the suppurative inflammation of the cyst; and 3. The supuration of the cyst, which always takes place when the canula is left in, results from the contact of the inner surface of the cyst with the air; in other words, from the conversion of a closed into an exposed wound. In the latter stage of simple tapping, air obtains access to the interior of the cyst during the interruption of the jet of fluid. Thus admitted it will vary in the effects it produces, according to the condition of the surface and the nature and amount of the contents of the cyst; for, as it is impossible to entirely empty the cyst, the portion of fluid which remains is placed in permanent contact with the air that has entered. As far as the interior of the cyst is concerned, it is the substitution of an exposed for a closed surface, the effect of which will be more considerable in proportion as the cyst has become rugous and changed in structure. In describing the effects of the air upon the contents of the cyst, M. Guérin gives an account of a series of experiments he formerly performed, for the purpose of elucidating the action of the air upon the various physiological and pathological fluids of the economy. The effect was found to vary much in nature and intensity, or accordingly to whether the air acted upon physiological fluids, such as the serosity of the blood, or on pathological fluids, such as albuminous, gelatinous, or hydatiferous serosity, the various kinds of pus, or complex, excrementitious fluids, containing coagulated or altered blood, or the *débris* of fœtus. Moreover caloric is not only a powerful auxiliary, according to its degree, but in proportion to the number and quantity of animal substances held in suspension during warm seasons. All these combinations of fluids and modes of action of the air may be met with in ovarian cysts; and we should not feel surprise at finding the effects as different as the causes. A simple cyst, containing only serum, exhibits no diseased action even from the prolonged contact of air; while in one containing fluid more susceptible of alteration, as pus, or the detritus of hydatids, the slightest contact with air may give rise to the most formidable consequences. Another class of accidents met with in operating upon cysts arises from the effusion into the peritonæum of a portion of the contents of the sac, of air, or of the injected fluid. Former experiments of M. Guérin have convinced him that the effusion of air into

this cavity gives rise to severe symptoms, which however soon disappear, and are never followed by death. In the human subject the accidents may be more serious, as is shown in those cases in which air has been impelled through the uterus and Fallopian tubes, by the careless use of the elysopomp. In nine or ten cases which M. G. has witnessed of this kind, symptoms of severe peritonitis appeared, but after a day or two disappeared, coincidentally with the evacuation of gas by the alimentary passages.

For the prevention of the entrance of air while operating upon ovarian cysts, M. Guérin exhibited an ingenious instrument to the Academy, which we have not space to describe. MM. Velpeau and Malgaigne combated M. Guérin's "airophobia" at great length: but as this has led to another discussion concerning the principles upon which subcutaneous surgery is founded, we defer noticing their arguments to another opportunity.

Bulletin de l'Académie, Tome xxii. pp. 20, 38, 60 *et seq.*

GENERAL CORRESPONDENCE.

POOR-LAW MEDICAL OFFICERS IN IRELAND.

[To the Editor of the Medical Times and Gazette.]

Sir,—Your anxiety to improve the position of the Irish Poor-law Medical officer leads me to hope that you will kindly insert this letter in the next number of the *Medical Times*. Two years ago I took charge of this district, which is twenty miles long and twelve broad, the population being 15,000, and the nearest medical man residing seventeen miles off. Since that time I have travelled, by night and by day, through bogs and by-roads, about 5000 miles each year, whilst visiting pauper patients, so that I travelled in all about 10,000 miles. My salary is £70 a year. I keep two horses, and, to do the work of the district with any degree of comfort, four would not be too many. Certain members of the Dispensary Committee have been in the constant habit of interfering in a most unjustifiable way with my private practice, by issuing visiting tickets to persons in comfortable circumstances, as well as to those for whose benefit the institution was established. Tickets were also filled and issued by the wives and daughters of members, who of course had no authority to do so. I protested against this infringement on the rules of the Poor-law Board, and the result was a special meeting, at which the following resolution was carried:

"Resolved, that Dr. Laird be communicated with through our Secretary, to send a written reply on or before next Monday to the following queries:—1. Will Dr. Laird attend visiting and dispensary tickets, signed by the members of Committee, no matter by whom filled?" Now to act upon such tickets would be most absurd, because it is quite evident that any member could then sign any number of tickets, and hand them over to his next door neighbour for distribution.

"2. Will Dr. Laird attend and give his own medicine in every case of a person residing in this dispensary district in which no visiting ticket is issued, for 5s. the case, and 2s. 6d. medicines, or, if the person attend for advice at the Doctor's residence, will he give advice and his own medicines for 2s. 6d.?"

Third query had reference to the opening of two branch Dispensaries in places by no means easy of access. Not a word about any increase of salary. This meeting was called and attended by the Chairman and Assistant-Secretary of the Committee, and these gentlemen (?) are magistrates and grand jurors!! who think themselves privileged to insult the Medical officer by offering him 7s. 6d. for attending their wives and families in any illness, however serious. Of course I declined the honour, and accordingly sent in my resignation on Monday last.

I am, &c. S. LAIRD, M.D.

Dungloe, co. Donegal, February 10, 1857.

MORTALITY AFTER AMPUTATION.

[To the Editor of the Medical Times and Gazette.]

Sir,—In my communication, published in the *Medical Times and Gazette*, page 111, I laid before your readers some information on the subject of the rate of mortality after operations in St. George's Hospital, and on the prevalence of pyæmia in that

institution. I had hoped, and still indulge the expectation, that similar information will be furnished from other hospitals, so that whatever doubt may exist as to the rate of mortality in former times, we may be in a position to say with some degree of certainty what the expectation of recovery after amputation is in a London hospital at present. (a) I also gave the necessary extracts from the hospital books to show the prevalence of pyæmia during the last thirteen years, which would I hoped refute the delusion that chloroform had any share in producing that affection. I am glad to see that the very clear evidence which I was able to produce on that point has had some effect upon Dr. Arnott. As, however, he still elings to the idea that chloroform may have increased the mortality after amputation by predisposing to other secondary affections, I am tempted to request space in your journal for the appended statement of the cause of the 32 deaths after amputation which I previously tabulated. The cause of death has been in every instance either verified by *post-mortem* examination, (and this is the case with the very great majority,) or was diagnosed by unmistakable symptoms at the time. The results will show, I hope to the satisfaction of your readers, that the "other secondary affections" have no existence except in Dr. Arnott's imagination, and that no cause except the prevalence of pyæmia has been in operation to produce a mortality which is, I believe, somewhat in excess of the average, though less than Dr. Arnott supposes. My previous tables must, I think, have proved to demonstration that the administration of chloroform can have had nothing to do with this prevalence of pyæmia, *ergo*, cannot have unfavourably affected the mortality after amputations. Allow me to add, that almost every one of these cases fell under my immediate notice and was the subject of my anxious study, and your readers will then be at no loss to understand why I could not see without protest a theory put forward which was so directly in contradiction to all that my previous experience had taught me. I also append another short table, to show the mortality after the various classes of amputations. The numbers are yet too small to subdivide these classes into primary, secondary, and for disease. The numbers differ slightly from those in the previous table, in consequence of my having inadvertently admitted into the latter two cases of amputation of portions of the hand and foot.

If this controversy has had the effect of awakening renewed attention to hospital statistics, and to the danger of theorising on medical matters without those details which are absolutely necessary for the formation of any reasonable opinion, my part in it, though ungrateful, will not I think have been unprofitable.

I am, &c.

4, Vigo-street, Feb. 24.

T. HOLMES.

Table 1.

1851. Number of amputations, 14; 4 died, all of pyæmia. Post-mortem examinations in all cases.
1852. Number of amputations, 20(b); 3 died, 1 of exhaustion, 1 suffering from malignant disease, 1 of pleuro-pneumonia; 1 had had previous disease of the chest; 1 with clear symptoms of pyæmia. No post-mortem examination in any case.
1853. Number of amputations, 23; 9 died; 5 of pyæmia; 1 of phthisis, 1 of scrofulous disease of the kidneys and phagedæna of another wound; 1 of slight secondary hæmorrhage in a patient exhausted by previous arterial hæmorrhage in hospital gangrene; 1 (an old woman, primary amputation) of sloughing and hæmorrhage. Post-mortem examinations in all cases.
1854. Number of amputations, 18; 7 died; 6 of pyæmia; 1 of strumous disease of the brain and lungs. Post-mortem examinations in all cases.
1855. Number of amputations, 16; 7 died, all of pyæmia. All examined after death.
1856. Number of amputations, 14; 2 died; 1 of pyæmia, (had compound fracture of the opposite thigh and ulcer of the stomach); 1 of rupture of the bladder. Both examined after death.

Thus, out of the 32 deaths, 24 were caused by undoubted pyæmia, 1 probably by pyæmia, 1 by exhaustion following

(a) This information for the last three years and a half can be obtained by consulting the pages of this Journal.—Ed.

(b) Excluding 2 of portions of the hand and foot, inadvertently admitted into the previous list.

malignant disease, 1 by secondary hæmorrhage to a very slight extent supervening on previous profuse arterial bleeding, 1 by sloughing and hæmorrhage (an old man), 3 by organic disease, and 1 by other necessarily fatal injuries.

Table 2.

	Number.	Deaths.	Rate per cent.
Amputations of the thigh . . .	55	20	35.4
Amputations of the leg . . .	28	9	32.1
Amputations of the arm . . .	16	3	18.7
Amputations of the forearm . . .	6	—	—

NOTE.—The rate per cent. on the whole number, excluding the amputations of the forearm, is 32.32.

SALTS OF ZINC AS A GARGLE.

[To the Editor of the Medical Times and Gazette.]

SIR,—I am glad to see that Mr. T. W. Nunn speaks favourably of the use of chloride of zinc, in the form of Burnett's solution, as a gargle; but it is not a new remedy, inasmuch as I have used it myself for many years, and published a formula for it in the "Surgeon's Vade Mecum," fifth edition, 1851; so that it must by this time be known to at least six or eight thousand Medical Practitioners.

May I add, that the salts of zinc furnish the most efficient, cleanly, and agreeable gargles and washes for the mouth in almost all disorders in which astringent applications are expedient. I published also in 1851 a prescription for a gargle of sulphate of zinc, which is now becoming extensively used in cases of relaxed throat, deafness, and loss of voice. It is infinitely superior to the old-fashioned combinations of mineral acids, which set one's teeth on edge, and send a shiver down one's spinal marrow, on the very thought of them.

I am, &c.

R. DRUITT.

Curzon-street, March 4, 1857.

DR. WEBSTER ON TOBACCO.

[To the Editor of the Medical Times and Gazette.]

SIR,—Your correspondent, "Jean Nicotin, M.D.," having referred to the pages of the *Medical Times and Gazette*, from July to October 1852, and the Medical Society's Minutes, for the dictum attributed to me that, "Cretinism is invariably present in the post-mortem examinations of inveterate smokers," permit me to say, my researches have proved wholly unsuccessful. In the former authority, I could discover no allusion to the subject, with reference to myself; and respecting the London Medical Society, my friend, Dr. Smith, the Medical Secretary, in reply to a request of mine, kindly wrote me as follows:—

"I have looked through our minutes for the year 1852, and do not find your name mentioned, at any meeting from May to December, as an author of a paper, or a speaker on any subject, at the Society." This is conclusive, and shows there must prevail some misunderstanding. Perhaps, M. Nicotin alludes to the Royal Medical and Chirurgical Society, where a paper I wrote was read at the meeting held the 25th of April, 1854, on "The statistics and morbid appearances of mental diseases," of which an abstract, with an account of the subsequent discussion, appeared in the Medical Journals of the 6th May. During the remarks then made, among other statements I said:—"Tobacco smoking was likewise a much more frequent cause of mental disease than many persons, perhaps, supposed. The excess to which this filthy custom—so injurious to the bodies and minds of enslaved votaries—had been of late years pushed, seemed certainly an increasing evil, and therefore produced serious consequences to a greater extent than formerly. In the United States of America, Medical men considered it as often a source of insanity in various individuals admitted into asylums; and the Physicians of several establishments in that Republic mention the fact, and even prohibit all tobacco-smoking among inmates, believing such practices protract recovery. That my opinions regarding the baneful effects so produced have not since then undergone any modification, I would crave permission also to quote some recent remarks on the subject, contained in my "Notes on Belgian Lunatic Asylums," published in the *Psychological Journal* for last January, viz.:—"In this country, (meaning Belgium,) where almost every man and boy, nay even woman, seem slaves to that degrading, filthy custom, and health-destroying—both of body and mind—

abomination, Tobacco-smoking; these appendages (spittoons recently placed in the lunatic wards,) become absolutely essential." Subsequently it is also remarked,—“I am no advocate of smoking, on the contrary, would strongly condemn such an unseemly habit—or vice, more correctly speaking—from believing it proves both injurious to the mental faculties, and inimical to the physical frames of many votaries.” Doubtless, the mistake which has arisen originates in the quotation first transcribed; but if otherwise, your correspondent J. N. may, I hope, be induced to point out the page of your Journal containing the expression enunciated, and thus remove any ambiguity or mystification.

I am, &c.

JOHN WEBSTER.

March 2, 1857.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

(Continued from page 228.)

Dr. WILKS showed, for Dr. BURTON BROWN, some SPECIMENS OF LOOSE BODIES IN THE PERITONEUM,

which that gentleman had found in the dissecting room of Guy's. Many similar ones had already been shown at this Society by various members, and different opinions expressed as to their nature. They are generally much alike, consisting of a substance about the size of a bean, having a dense fibrous capsule, and containing within some amorphous matter composed of fat and earthy material. These bodies have generally been found loose, though sometimes hanging by a thread, as if just ready to drop, as in some specimens in Guy's museum. The present one corresponded in every respect with these, but was found developed within one of the appendices epiploicæ, from which circumstance Dr. Brown concluded that these bodies were new growths formed within the appendices, and that they were subsequently set free by the strangulation of the pedicle, and he was inclined to suppose that they were alterations of lymphatic glands, which he had often found to exist in these intestinal appendages.

Dr. QUAIN presented for Dr. Hughes Bennett a specimen of ALBUMINOUS CONCRETION FROM THE CAVITY OF THE ABDOMEN.

The specimen, which is as large as a billiard ball, was removed from the abdomen of a pauper who had never shown any symptoms of its presence during life, by the late Dr. John Reid. The structure of this concretion entirely resembles one presented by Mr. Shaw, of which an account is published in Volume VI. of the Society's "Transactions." Both are formed round a nucleus of fat. Dr. Bennett describes the nucleus in this example as consisting "essentially of segments of large cells, very probably those of fat, separated by slightly fibrous partitions, in which traces of fusiform bodies are faintly visible. Towards the periphery of the nucleus the cells are filled with mineral matter, that, in a molecular form, is infiltrated through, and gives firmness to the external portion of the nucleus, which is surrounded also by a fibro-calcareous envelope." Dr. Bennett regards the tumour as a result of the mechanical depositions of coagulated albumen around a nucleus of fat. He refers to the views of Ascherson on the influence of fat on albumen, and supposes these tumours to originate around one of the appendices epiploicæ, or other fatty texture, which had become detached from the walls of the intestines or of the abdomen.

Dr. BRINTON remarked, respecting the theory that these bodies resulted from detached appendices epiploicæ, that they were not unfrequently found hanging from the small intestines.

Dr. OGLE could quite confirm Dr. Brinton's remark. He met with a case in which one hung pendulous, and all but detached from the liver.

Mr. WILLIAM ADAMS exhibited a dissected specimen of

CLUB-FOOT,

which had been several times operated upon unsuccessfully. It had been removed from the body of a man, aged 37, who had died in University College Hospital, after excision of the knee-joint of the opposite leg. For the opportunity of examin-

ing the foot Mr. Adams was indebted to Mr. Erichsen. The deformity at the time of death was a well-marked example of equino-varus; probably the inversion of the foot had been more severe, and the case might have been one of varus. It was of non-congenital origin, and undoubtedly the result of infantile paralysis, though said to have been caused by a burn at the age of 2 years. The man said he had been in several Hospitals, and the left foot had been repeatedly operated upon for the cure of the deformity, but the dates of these operations were unfortunately not ascertained from him. A very important point in the pathology is therefore lost, but it is probable that a long time had elapsed since some of the operations, whilst it is very improbable that any had been performed in less than six months before his death. On dissection all the muscles of the leg below the knee were found to be in an extremely advanced stage of fatty degeneration, and of a yellow fatty appearance to the naked eye, except the tibialis anticus, which was of a pale red colour, and but slightly degenerated. The tendo-Achillis had been divided three or four times, and in one instance the new tissue appeared to have been cut into. New tendon was seen to be intermixed with old tendon through a space of two inches, but it was impossible to say exactly how much new tendon had been formed, probably from an inch to an inch and a half. The posterior tibial tendon had been once divided only half through, above the inner malleolus—a wedge-shaped portion of new tendon existing in this situation—and once completely through, behind the malleolus; and in the latter situation the divided extremities of the tendon had never reunited. A small quantity of new tendon had formed in connexion with each of the divided extremities, but towards the centre each portion of new tendon was firmly adherent to the anterior wall of the dense sheath behind the malleolus. It thus afforded an excellent example of non-union of divided tendon. The tendon of the flexor longus muscle had been twice divided at points corresponding to the operations on the posterior tibial tendon. Seven-eighths of an inch of new tendon connected the divided extremities of the old tendon at the superior operation; and one inch and an eighth of new tendon connected the divided extremities of the old tendon in a similar way at the seat of the inferior operation. The new tendon presented to the naked eye a greyish, translucent appearance, and was thus readily distinguishable from the opaque, glistening old tendon. Microscopically examined, the fibrous tissue of the new tendon was seen to be much more delicate than that of the old tendon, and its general characters were the same as those described by Mr. Adams as existing in the newly-formed tendon in rabbits after subcutaneous division. (See *Medical Times and Gazette*, January 12th, 1856; and also *Path. Soc. Trans.* vol. vi., and represented in Plate 18 of this volume.) The length of new tendon existing in this specimen was opposed to the theory still advocated of this structure being of a temporary nature, serving only a temporary purpose, and then undergoing contraction, and at last complete absorption, so that the divided extremities of the old tendon reunite, and a linear cicatrix alone remains. In this specimen there can be no doubt that the new tendon was a permanent tissue, and it is important to observe that it existed in considerable quantity in the tendo-Achillis, even though recontraction and relapse of the deformity had certainly twice occurred. The posterior tibial nerve was enlarged to twice its normal size, at a point corresponding to the lower division of the tibialis posticus and flexor longus tendons. The nature of this enlargement was specially investigated by Dr. G. Harley, who reported that the common neurilemma, or vagina cellulosa, surrounding the enlargement, was thickened, and a considerable increase of cellular tissue distributed among the nerve fibres. Upon this the enlargement seemed to depend. The tubular nerve fibres throughout the enlargement were well formed, and showed very distinctly their normal sinuous outline and double contours. There was little doubt that the nerve had been divided. An irregular distribution of the arteries of the leg (which had been injected in the specimen) existed. The posterior tibial artery was absent,—a fortunate circumstance, as the nerve had been divided,—but the peroneal artery, which occupied its ordinary position, was enlarged to the size of the posterior tibial behind; and the outer malleolus, after giving off small branches, crossed the ankle-joint towards the inner side of the os calcis,—it might almost be said to wind round the superior and internal surfaces of the os calcis

—and from this point its distribution in the sole of the foot was normal.

Dr. COCKLE showed a specimen of

INTRA-THORACIC CANCER,

occurring in a married female, aged 28. The mass was tripartite, exceeding in aggregate bulk an adult head, and of so semi-fluid a consistence that, in detaching it from its connexions, large quantities of grumous blood and encephaloid matter escaped. The portions of the mass were incrustated with a fine bounding membrane, of glistening character. The larger rounded portion occupied nearly the entire left side of the chest, crushing the lung along the vertebral column, and adhering to its anterior face. Firm adhesions existed on this side throughout, particularly between the tumour, spine, and mid-portions of the fourth, fifth, and sixth ribs, which latter were markedly softened, and formed a medium of connexion between the tumour and an oblong swelling on the outer chest wall of some inches in area, corresponding to the left axillary line. The tumour, in its progress, gradually carried the heart before it as far as the right nipple, where, during life, it was seen and felt pulsating. The tumour itself extended but slightly beyond the right costal cartilages. By this encroachment, however, together with the displaced heart, the right lung also was greatly lessened in volume, to the extent of at least one half, and bound down by adhesions. The second portion of the tumour, the size of an orange, nearly separate from the larger mass, lay behind the manubrium sterni, and a still smaller portion, of fig-shape form, was situate below the xiphoid cartilage. The heart was normal in size and structure. Considerable effusion existed in the peritonæum, as also excessive infiltration of the lower extremities. The symptoms and physical signs in this case, in its early and middle stages, were those of relapsing pleurisy, with copious and possibly circumscribed effusion. One important point, however, to be mentioned was the increase, by measurement, over the left mammary region, but since here tenderness, and a markedly liquid impulse during cough existed, the case was at this period mistaken by him for empyema, and these signs regarded as marking a tendency to the production of an emphyema of necessity: and it was only after an exploratory puncture had been unsuccessfully made, together with the occurrence of the external tumour, that a suspicion was excited of malignant growth.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

FEBRUARY 24, 1857.

Mr. CÆSAR HAWKINS, President, in the Chair.

A paper was read by Professor SYME, of Edinburgh,

ON DISARTICULATION OF THE SCAPULA FROM THE SHOULDER-JOINT.

Janet S—, nearly seventy years of age, was admitted into the Royal Infirmary of Edinburgh, on the 18th of September, 1856, on account of a large tumour involving the left scapula. In size and form it resembled a cocoa-nut. In some parts it was as hard as bone; in others, elastic but firm. It presented a distinct bruit, and communicated a strong pulsatory movement. The tumour was first noticed about six months before, when it was the size of an orange. Considering, on the one hand, that the extension of the growth into the axilla rendered relief by a partial removal of the bone impossible,—the unsatisfactory result of that operation in Mr. Liston's recorded case,—the fearful mutilation which it would involve,—and the small hope of a successful issue to so formidable a procedure at her advanced age; whilst, on the other hand, the chief obstacles to recovery seemed likely to be serious hæmorrhage (which it was thought might be prevented), or excessive drain upon the patient's strength in the subsequent suppuration,—Mr. Syme determined to remove the entire bone. This was done as follows: an incision was made from the acromion process transversely to the posterior edge of the bone, and another from the centre of the first directly downwards below the lower margin of the tumour. The flaps thus formed were then reflected. The scapular attachment of the deltoid, and the connexions of the acromial end of the clavicle were next divided. With a view

to prevent the most serious source of hæmorrhage, the sub-scapular artery was next cut across, and secured. The joint and circumference of the glenoid cavity were next divided; the finger being hooked under the coracoid process greatly facilitated the division of its attachments, and enabled the operator to pull back the bone, and separate its remaining attachments with rapid strokes of the knife. The limb was supported and retained in situ by a bandage. The tumour, on examination, was found to consist of a nearly uniform expansion of the bone into a bag, partly membranous, partly osseous, containing a cerebriform growth, and extended to the margin of the glenoid cavity and spine of the bone. All seemed to promise well after the operation; the wound healed rapidly. At the end of a fortnight the amount of discharge was scarcely sufficient to stain the bandage. The shoulder assumed a very natural appearance, and it seemed that by the support afforded by the clavicular portion of the deltoid, together with the action of the pectoralis and latissimus dorsi, the limb would be able to execute a fair degree of motion,—indeed, the woman was with difficulty prevented using the limb too freely; but the patient's strength did not improve in a corresponding degree, and towards the end of November she suddenly sank, and died on the first day of December. The author concluded with the expression of a hope that this case would tend to encourage greater freedom in operating for diseases of the shoulder-joint as well as scapula, proving, as it did, that the scapula may be removed without serious loss of blood; that the resulting wound does not necessarily occasion excessive discharge, and that the arm becomes afterwards a serviceable limb.

Mr. HALE THOMPSON, while entertaining the greatest respect for Mr. Syme as an operating surgeon, thought no operation could be more undesirable than that recommended by him to the Society; for if the scapula were removed, the arm must of necessity be useless. It was stated that the patient could use her arm after the operation, but in all probability she could use it about as well as she could use the other arm, which was paralytic. If there could be any case showing the undesirableness of the operation, it was the case brought forward by Mr. Syme.

The PRESIDENT said it was interesting to know that a patient might recover the use of the arm to a certain extent after such an operation. There were few cases, however, in which the operation could be practised, since there were few in which the tumours were circumscribed by bony coverings. The greater number of cases would be those of medullary disease. He had one such under his care at the present time, that of an enormous medullary tumour growing in every direction from the outside of the bone.

Mr. CURLING said he should be sorry to have it supposed that the opinions expressed by Mr. Thompson were entertained by the majority of the members present. So far as he (Mr. Curling) could judge, the operation was a skilful attempt to remove a tumour which could not have been got rid of by any other means. No doubt the circumstances of the patient were unfavourable, but under other circumstances he did not see why the operation might not be successful. He considered that it was justified upon every sound surgical principle.

Mr. SYME said it might appear almost incredible that the removal of the scapula should allow the arm to be useful; but it would seem still more surprising that the removal of the entire clavicle should not produce any alteration in the position of the shoulder, or in any way interfere with the usefulness or mobility of the arm; a fact to which he could testify from his own experience. A gentleman on this side of the Tweed had that operation performed some years ago, and to his (Mr. Syme's) surprise, when he saw him afterwards, no one could have perceived any difference in the appearance or mobility of the arm, although the limb was deprived of so important a support. No doubt such cases as the one he had described in his paper were very rare, but he considered that the knowledge of the facts detailed might serve to strengthen the hands of future operators.

(To be continued.)

ANNUAL MEETING, MARCH 2, 1857.

Mr. CÆSAR HAWKINS, President, in the Chair.

The SECRETARY read the minutes of the last meeting, and then read an abstract of the receipts and expenditure from March 1856 to March 1857.

Abstract of the Receipts and Payments of the Royal Medical and Chirurgical Society, from March 1856 to March 1857:—

RECEIPTS—ORDINARY INCOME.

Subscriptions, fees, etc.—277 Annual Subscriptions, £872 11s.; 6 ditto arrears, £18 18s.	£	s.	d.
14 Admission Fees, £88 4s.; 4 Composition Fees, in lieu of further payment, £31 10s.; Fines, 4s.	891	9	0
Transactions, etc.—Sale of Vol. XXXVIII., by Messrs. Longman (balance), £40 3s. 5d.; Sale of previous volumes by do., £34 7s. 3d.; Sale of previous volumes by the Society, £10 19s. 9d.; Sale of Catalogue, 10s.	119	18	0
House—Rent of Rooms from "Society for the Relief of Widows and Orphans of Medical Men," £52 10s.; Rent of Stables, £30	86	0	5
Interest—On Stock £3028 11s. 11d. (3 per cent. Reduced), £84 16s.; on temporary Deposit at Bankers, £9 16s. 3d.	82	10	0
	94	12	3
	£1274	9	8
From former Statement, 1856—Balance in hand	182	0	2
	£1456	9	10

Amount of Stock now standing in the names of the Trustees, £3028 11s. 11d.; added February, 1857, £212 9s. 8d.
Balance in the hands of the Society's Bankers

54 11 2

PAYMENTS—ORDINARY EXPENDITURE.

House—Rent, £160 per annum, less £11 6s. 8d. deducted for Property-tax, £148 13s. 4d.; Assessed and Land-taxes, £7 5s. 6d.; Property-tax, £12 13s. 4d.; Water-rate, £3 7s. 6d.	171	19	8
Lighting, Warming, etc.	41	13	1
Repairs, etc.	22	14	2
Petty Cash	45	14	2
Stationery, printing Circulars, etc.	36	9	10
Salaries, etc.	199	6	0
Library—English books purchased, £45 2s. 7d.; foreign ditto, £96 2s. 6d.; Bookbinding, £20 7s.; Insurance, £13 10s.	175	2	1
Transactions, Vol. XXXIX.	231	0	8

EXTRAORDINARY EXPENDITURE.

Annuity to Mr. Williams	80	0	0
Catalogue	197	19	0
Purchase of Stock, £212 9s. 8d. (3 per cent. Reduced) inclusive of £31 10s., the amount of Composition Fees (as per contra)	200	0	0
Balance carried down	54	11	2
	£1456	9	10

It was ordered that the auditors' report be received and adopted, and circulated among the Fellows.

The SECRETARY next read the report of the Council. It stated that the condition of the Society was satisfactory. During the year, fourteen Fellows have been elected, of whom eleven were resident and three non-resident. In the same period, the Society have lost by death eight Fellows, seven resident and one non-resident. One Fellow has resigned. One foreign Fellow and one foreign honorary Fellow have died, and six have been elected. The total receipts of the Society during the year were £1,274 9s. 8d., making with £182 0s. 2d. in the hands of the treasurer at the beginning of the year, £1,456 9s. 10d. The expenditure in the same period was £1,401 18s. 8d., leaving a balance of £54 11s. 2d. Including a purchase of 3 per cent. stock, the funded property of the Society amounts to £3,241 1s. 7d. The librarian reported that 297 works had been added to the library, 138 by donation and 159 by purchase; and that by the exchange of duplicates with the Royal College of Surgeons, 107 works had been obtained, not previously in the library. The report further stated that the Council had decided to publish the

Proceedings of the Society, and they proposed that the Pathological Society should be allowed to hold its meetings in their rooms on payment of an annual rent of £20.

Dr. BURROWS, as one of the older members of the Society, could not but congratulate his brother Fellows on the satisfactory state of the report, satisfactory both as regarded their finances and their ability to carry on the object of the Society, the promotion of medical and surgical science. He congratulated them particularly upon the decision of the Council to publish notices of their proceedings, as he was sure this step would be attended with very beneficial results. There were a great many working men in the metropolis belonging to the profession, who would readily communicate papers of immense practical importance and great interest, upon subjects quite fit to be discussed in that room, which, perhaps, might not be sufficiently elaborated to deserve publication in the Transactions of the Society, but which were yet of great passing interest, and it would be matter of regret if notice were not taken of them. Then, there was another part of the report upon which he must congratulate them, with reference to a more intimate connexion and a more friendly feeling hereafter to subsist between their Society and its younger sister, the Pathological Society. As an old member of the Medical and Chirurgical Society, he had always regretted that those ardent spirits who formed the Pathological had been compelled to separate from them and to form a separate society of their own. Any measure which should bring the Pathological back to the parent Society, if he might so call it, would tend very much to the prosperity of both. For these reasons, he had great pleasure in proposing that the report be received, and adopted, and circulated among the Fellows of the Society, and that the sanction of the meeting be given to the arrangement proposed with the Pathological Society.

Mr. STANLEY seconded the motion.

The motion was carried unanimously.

The PRESIDENT then read the customary address. With reference to the recommendation, sanctioning the future meetings of the Pathological Society in their room, the President said he had the honour of being one of its earliest Vice-Presidents, and subsequently its President; and he had seen, with great pleasure, the uniformly increasing value of that Society, and had often regretted that there never had been a more intimate union between the two Societies, so that the Pathological might rather look upon the Medical and Chirurgical with affection as a parent, than simply as an ally in the cultivation of Medical science. He was, therefore, glad to witness that proposed degree of association in which, however, each would pursue its separate sphere of usefulness. Touching the proposal to publish a notice of their proceedings, so as not to interfere with the Transactions, the President said he hoped the Fellows would approve of a step which showed that the Council were not indisposed to novelty when they thought it advantageous to the interests of the Society. The President next proceeded to what he described as "the customary but unsatisfactory duty" of laying before the meeting the losses the Society had sustained since the last anniversary. Of the resident Fellows, one only had been removed, Mr. J. R. Vickers, who occupied for many years a highly respectable position as a general practitioner. He died on the 12th of August last. Among the non-resident Fellows not less than seven had died. On February 20, 1856, Mr. Thomas Salter, of Poole, died; he was a member of the Royal College of Surgeons. His professional reputation induced the Council of that body to place him among the Fellows elected by them in 1844; while his social position and estimation among his fellow-townsmen were shown by his magisterial office, and by the influence, moral and political, which he is said to have exercised. On April 4, prematurely cut off, died Mr. Frederick Field, of Birmingham. He became a member of the College of Surgeons so late as 1843, and promised to have been an honour to the school of Birmingham, in which he was educated. Mr. J. P. Peregrine was a Fellow of the Medical and Chirurgical Society thirty-seven years, the greater part of which he was a resident in London. He served in the Royal Horse Artillery two years before commencing practice in 1807. He retired from practice in 1846, and died at Jersey, at the age of 73, on the 27th of April. On the 4th of June, at the age of 93, died Sir Alexander Crichton. He came to study anatomy in London in 1784, and was examined for his degree in 1785. He studied in Paris before the commencement of the French

Revolution, and afterwards prosecuted his studies in Germany. He became a member of the College of Physicians in 1791. The President then referred to the professional career of Sir A. Crichton in the service of the Russian Court, and to the favours and honours that were heaped upon him by the Emperors Alexander and Nicholas. On September 6th, died at Madeira, Dr. A. C. Ross, where he had practised the greater part of his life. Dr. Ross was in this country last year, when cholera commenced in a virulent form in Madeira. He immediately proceeded to the island, and within a week after landing fell a victim to the disease. On November 19th, died Mr. C. B. Warner, who had been a Fellow of the Society for the long period of 40 years, and who practised many years at Cirencester. Dr. D. C. Macreight, who retired from practice some years since, died at Jersey on December 10th. The next obituary notice referred to Dr. Buckland, Dean of Westminster, who died August 15th, at 72 years of age. The President gave a sketch of Dr. Buckland's geological and palæontological labours, and stated that from his connexion with the science of comparative anatomy he was elected an honorary Fellow of their Society in 1825. Among their foreign honorary Fellows, Dr. J. Warren, of the United States, died on the 10th of May last. He obtained his doctor's degree in Cambridge, U.S., in 1797, at the early age of 19, after which he pursued his studies in Europe chiefly in England, a period of his life of which he always retained a grateful recollection. Dr. Warren, it was stated, had written a genealogical work to prove his descent from Earl Warren, who married a daughter of William the Conqueror, and built Lewes castle, in Sussex, and according to the directions contained in his will, his bones after death were macerated, then articulated, and hung up in the Boston Museum. Passing from this part of the address, the President said he could not conclude without thanking the Fellows of the Society very warmly and sincerely for the support they had rendered him while holding for the last two years the office of President. He congratulated himself and them, that his period of office had been marked by uniform harmony and good feeling.

The PRESIDENT resumed his seat amid hearty plaudits.

Dr. WEBSTER was sure the Society would agree with him in the request that the President would allow his address to appear in their Proceedings. (Hear, hear.) He had listened to it with a great deal of satisfaction.

Mr. HALE THOMPSON supported the request. He was sure that the friends of the deceased Fellows would be gratified if a record were made of the obituary notices prepared by the President.

The PRESIDENT said, if it was the wish of the Society that the address should appear in their Proceedings, he had no objection.

Mr. TRAVERS said, as a member of very long standing, he claimed the privilege of proposing a vote of thanks to the President, for the able and important services he had rendered to the Society during his period of office. He thought they would convict themselves of great oversight, not to say ingratitude, if they were not to commemorate his services by a vote of thanks.

The PRESIDENT briefly acknowledged the compliment, observing that it had been a great pleasure to him to preside over their meetings.

The PRESIDENT then announced the result of the ballot for the election of officers, and other members of Council, for the year 1857-8:—

President.—* Charles Locock, M.D. *Vice-Presidents.*—* George Budd, M.D., F.R.S.; * Seth Thompson, M.D.; Richard Quain, F.R.S.; * James Dixon. *Treasurers.*—George Cursham, M.D.; Thomas Blizard Curling, F.R.S.; *Secretaries.*—* Andrew Whyte Barclay, M.D.; Spencer Smith. *Librarians.*—William Wegg, M.D.; John Birkett. *Other members of Council.*—* Arthur Farre, M.D., F.R.S.; * Henry Hunt, M.D.; * John Snow, M.D.; Alexander Patrick Stewart, M.D.; * Frederick Weber, M.D.; * Edward Cock; Henry Lee; George David Pollock; George James Squibb; * Nathaniel Ward.

Dr. LIVINGSTON.—The Corporation of the City of London have resolved to grant the Freedom of the City to this celebrated medical missionary.

THE INFIRMARY, BLACKBURN.—The working men of Blackburn have now £410 in Cunliffe's Bank, in aid of the fund for erecting an Infirmary.

POOR-LAW MEDICAL REFORM.

BRISTOL ROYAL INFIRMARY.—A meeting of the Students of the Bristol Medical School was held at the Bristol Royal Infirmary on Friday last, February 27, for the purpose of supporting Mr. Griffin's movement on Poor-law Medical Reform. T. E. Clark, M.R.C.S., in the chair. The following Resolutions were adopted:—Proposed by Mr. Homfray, and seconded by Mr. Featherstone,—1. That this meeting tenders its best thanks to Mr. Griffin for his unwearied zeal and exertions in behalf of the Poor-law Medical Reform. Proposed by Mr. Willy, and seconded by Mr. Webster,—2. That this meeting seeks to support Mr. Griffin's movement, considering the present system of appointing and remunerating Poor-law Medical officers perfectly unjust. Proposed by Mr. Grace, and seconded by Mr. George Ormerod,—3. That this meeting earnestly urge their brother Students, in the United Kingdom, to join in pledging themselves, that, on the completion of their studies, they will not accept any appointment as Union Medical officers which has been relinquished from an inadequate salary. Proposed by Mr. Faull, and seconded by Mr. Morgan,—4. That a subscription be immediately made to assist in carrying out the objects of the Association, and the proceeds be forwarded to Mr. Griffin. Proposed by Mr. Grace, and seconded by Mr. Faull,—5. That a vote of thanks be given to Mr. Clark for the interest he has shown, and able manner in which he has conducted the meeting.

MANCHESTER SCHOOL OF MEDICINE.—A preliminary meeting of the Students of the Manchester School of medicine, in support of Mr. Griffin's movement, was held on Thursday, February 19, W. Ramsden, Esq., in the chair, when a Committee, consisting of Chairman, Secretary, Treasurer, and seven members, was appointed. A general meeting of the Students was held on Tuesday, March 3, when the following Resolutions were adopted, Edward H. Pitman, Esq., in the Chair:—1. Proposed by Mr. Ramsden, and seconded by Mr. Barrett,—That the Manchester Medical Students are desirous of expressing their cordial approval of the measures undertaken by Mr. Griffin for the regulation of the salaries of Union Medical officers, and are willing to act in co-operation with other Medical Students in support of those measures. 2. Proposed by Mr. W. H. Broadbent, seconded by Mr. Payne,—That this meeting considers that the power of fixing the salaries of Union Medical officers, as at present vested, has been the source of great injustice and oppression, and ought to be transferred to a more disinterested and impartial tribunal. 3. Proposed by Mr. Brooke, and seconded by Mr. T. P. Smith,—That this meeting, considering unity of purpose and good faith among members of the Profession of vital importance to the cause of Medical Reform, desires to express its unqualified disapproval of the conduct of those who not only treat this movement with neglect and apathy, but even act contrary to its principles. 4. Proposed by Mr. Barrett, and seconded by Mr. Gould,—That this School is in favour of a general meeting of Students representing the different Medical schools, to express publicly their approval of, and their determination to assist to the best of their power, any measures taken to secure the more equitable and adequate remuneration of their Medical brethren holding public appointments. 5. Proposed by Mr. Sephton, and seconded by Mr. Ramsden,—That a member of the Committee be appointed by ballot to represent this School at the aggregate meeting of Students in London. 6. Proposed by Mr. Smith, and seconded by Mr. Brooke,—That a subscription be entered into towards a fund for defraying the expenses incurred by these meetings and the sending up a delegate, and that the surplus be handed over to Williams' Bank, to the account of the Poor-law Medical Reform Association. 7. Proposed by Mr. Payne, and seconded by Mr. Sephton,—That a report of the proceedings of this meeting be forwarded to the Medical and local Journals. Mr. W. Ramsden having taken the Chair,—8. Mr. T. P. Smith proposed,—That a vote of thanks be awarded to Edward H. Pitman, Esq., for the able manner in which he has acted as Chairman throughout the whole of these proceedings. 9. Proposed by Mr. Gould, seconded by Mr. Pitman,—That a vote of thanks be awarded to John D. Bird, Esq., for the able way in which he has discharged his duties as Honorary Secretary. Thomas P. Smith Esq., was then chosen to represent the School at the general meeting in London.—JOHN DURHAM BIRD, Honorary Secretary.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS,—FRIDAY, FEB. 27.

IMPORTATION OF DISEASED FOREIGN CATTLE.

Mr. STAFFORD said that, in consequence of the answer which he received the day before from the right hon. gentleman the Vice-President of the Board of Trade (Mr. Lowe), he wished to call the attention of the house to this important subject. As early as June last the English Consul at Hamburg communicated to the Secretary for Foreign Affairs, that the murrain was raging throughout the centre of Europe; and during a period of a century and a half more than 200,000,000 of cattle had perished from the effects of this fearful disease. He stated that the number of deaths averaged 80 or 90 per cent. of the cattle attacked with the disease, and that the cattle doctors had not discovered any remedy for it. All the letters which he (Mr. Stafford) had received concurred in considering that the disease was in the highest degree contagious, as all parts of the animal attacked were impregnated with the virus. He wished to know what the Board of Customs had done, and if nothing, what they were prepared to do?

Mr. LOWE said the Board of Trade had endeavoured to procure all the information they could, and for that purpose had placed themselves in communication with the Board of Customs, and from that board they had received an assurance that they were awake to the dangers which might ensue from this disease.

Lord NAAS said the answer of the right hon. gentleman was highly unsatisfactory. (Hear, hear.) Nothing had been done to prevent the importation of this terrible malady. Mr. Hewett, in his book on cattle, said it was an epidemic first introduced into England in 1745, and since that period that 40,000 head of cattle had died in Nottinghamshire and Leicestershire alone. The disease on its last visit lasted about eight years, and devastated almost every part of the grazing districts of England, carrying off enormous quantities of cattle. The disease was so contagious that the men employed about the cattle carried it in their clothes, and thus gave it to the animals.

Mr. PACKE.—This was a matter which affected not only the producers and feeders of cattle, but the consumers of meat. This ship load of foreign cattle would be scattered through the country; and no doubt would communicate the disease to the cattle of this country.

Lord PALMERSTON would certainly desire that inquiries should be made into this subject.

Sir J. TYRELL said the attention of the Royal Agricultural Society had been called to this subject many years ago, but it so happened that after much deliberation concerning this disease or epidemic, the Royal Agricultural Society came to the conclusion that nobody knew anything at all about it. The small-pox in sheep had a few years ago suddenly disappeared in a most miraculous manner; he knew himself of a case where ten beasts of one breed and ten of another were on the same farm; the whole ten of one breed had the disease, the whole of the other ten escaped.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, February 26.

BOYLE, THOMAS, Truro, Cornwall.

EARNSHAW, HUGH GRANGER, Clitheroe, Lancashire.

EVANS, ABEL, Llandyssal, Cardigan.

FULLER, SAMUEL, Army.

MATTHEWS, JOHN, Stow-on-the-Wold, Gloucestershire.

PARKER, THEOPHILUS ROBERT BUSH, Clifton, Bristol.

THOMAS, JOHN, Cardigan.

DEATHS.

DAVIES.—Feb. 22, at Horncastle, Lincolnshire, suddenly, William Davies, Esq., Surgeon, of Well-street, South Hackney, aged 57.

EVANS.—March 1, Thomas Evans, Esq., M.D., of Stockwell-park House, Surrey, and Kidwelly, Carmarthenshire, of heart disease and broncho-pneumonia, aged 57.

HUME.—March 1, at Curzon-street, May Fair, in his 76th year, Dr. John Robert Hume, C.B., one of her Majesty's Commissioners in Lunacy, and for many years private Physician to his Grace the late Duke of Wellington.

MANIFOLD.—Feb. 19, at Rodney-street, Liverpool, William Wright Manifold, Esq., Surgeon, aged 54.

O'DWYER.—Feb. 26, at Edward-street, Portman-square, John O'Dwyer, Esq., late of the Bengal Medical Service.

BEQUEST.

Robert Malcolm, Esq., Surgeon R.N., has bequeathed £1000 to the Royal Naval School, to found a University scholarship there.

TESTIMONIAL.

Last week a number of the friends and supporters of the St. Anne's Dispensary, Liverpool, held a meeting in the boardroom of the institution, for the purpose of presenting a valuable gold watch and guard chain to Mr. Evan Thomas Evans, the late house-surgeon of the charity, as a token of their appreciation of "his unwearied exertions, zeal, and kindness, whilst engaged in the institution." We are very happy to be able to record such events as these, and should be glad if they occurred more frequently.

PRINCE ALBERT'S LEVEE.—At the levee, on Thursday last, the following members of the profession were in the general circle:—Sir Henry Holland, Bart., Physician in Ordinary to the Queen; Sir Benjamin C. Brodie, Bart., Serjeant-surgeon; Mr. Lawrence, surgeon extraordinary to the Queen; Mr. Fergusson, surgeon extraordinary to the Queen. The following were presented:—Assistant-surgeon W. Cattell; Senior Surgeon Elliott, on return from the Crimea, and being nominated a C.B.; Dr. Furlong; Dr. J. B. Gibson, on being appointed a C.B.; Sir John Hall, Inspector-General of Hospitals, on his appointment as a K.C.B.; and Mr. Probert. The following attended the levee:—Drs. Faraday, Fergusson, M'Pherson, MacLaughlin, M'Cann, and Smith.

KING'S COLLEGE HOSPITAL.—The annual meeting of the governors was held on Thursday last. The report of the committee stated that the increase in the number of patients over those of last year had been 2005. Three additional wards have been opened, under the charge of Mr. Bowman and Dr. Arthur Farre. There is a great increase of persons applying for relief in the out-patient department, and nearly 500 persons receive advice and medicine daily. The income of the year 1856 was £5587 8s. 11d., and the expenditure £7858 9s. 11d. The only assets consisted of £2211 8s. 10d. in Consols, and £100 in the Three per Cents. reduced. The liabilities of the last year amount to nearly £2000, so that the charity is entirely dependent upon the current donations of the public for support. The great feature in the hospital administration during the past year has been an effort to introduce a new and improved system of nursing into the hospital. This effort, which the Committee describe as having been attended with the happiest results, came into operation on the 31st of March last. Miss Florence Nightingale has been amongst the visitors who have observed with interest the success of this important experiment, and after spending some hours in the hospital, expressed herself much pleased with the cleanly, cheerful, and home-like appearance of the wards. The Earl of Ellesmere, within the last few days of his life had sent them a benefaction of £200.

SEAMAN'S HOSPITAL SOCIETY.—The thirty-sixth anniversary of this charity was celebrated on Saturday evening with much success, at the London Tavern. From the report of the society, which was handed round the room, it appeared that, during the past year, 1851 patients had been admitted, while the number of out-patients for the same period was 1658, or 3509 in all. Since its foundation in 1821, no fewer than 124,000 sick seamen of all nations have been relieved by the society, 78,000 having been in-patients, and 46,000 out. The expense of fitting up the new hospital-ship, which had been given to the Society by the Admiralty, had been borne almost entirely by the funds of the charity.

The WILL of EDWARD CROOSDALE, Esq., M.D., late of Boulogne, has been sworn under £35,000; and that of Daniel Chambers Mackright, Esq., M.D., of Jersey, under £2000.

RECTOR OF ABERDEEN UNIVERSITY.—At the election of a Lord Rector for Marischal College and University on Monday, two nations voted for Mr. Layard and two for Lord Elgin. The vote being equal, and the choice falling to the Senatus, that body have agreed to leave it to Mr. Layard himself.

ROYAL ORTHOPÆDIC HOSPITAL.—The eighteenth annual court of the governors and friends of this institution was held on Thursday. The report alluded to the completion of the purchase of the new premises in Oxford-street. The committee strongly relied upon the public for the expenses of the necessary outlay for their adaptation. The required alterations having been made, the new premises were opened by his Royal Highness Prince Albert, in June last. The report stated that the funds had materially increased. The gross receipts for the past year had been £4022 15s. 1d., including £2084 9s. 11d. from the General Fund, and £1938 5s. 2d. from the Building Fund, of which a balance remained of £162 3s. 9d. The number of patients for the past year had been 1533, an increase of 132 on the previous year; and the total admitted since the foundation of the institution, had been 19,769. The mortgage of £6000 on the premises had to be redeemed, and it was essentially necessary to augment the funds for that purpose.

A TRIBUTE.—A beautiful cenotaph has recently been placed in the Plymouth cemetery, with this inscription:—"Erected by the commander, officers, and ship's company of H.M. steam sloop Argus, as a token of respect and regard for our deceased friends and messmates." The names are then given, and among them is that of Assistant-Surgeon Thomas Daly.

NEW ARCTIC EXPEDITION.—It is stated that in consequence of the adverse decision of the Admiralty in the House of Commons on Tuesday, Lady Franklin is about to undertake, on her own resources, the completion of the search for her husband's expedition.

DR. KANE.—Late accounts from Havannah report that Dr. Kane was on the point of death. A despatch had been received in New York by Mr. H. Grinnell, conveying sad intelligence of the intrepid voyager. The despatch comes *via* Mobile, and is as follows:—"Havannah, Feb. 13, 1857. Dr. Kane is still alive, but he can't last through the day. His mind keeps right. He has just left his friends and bidden his countrymen farewell.—W. Morton." Mr. Morton has been Dr. Kane's faithful servant and steward for the last seven years, and accompanied him twice to the Arctic regions. Dr. Kane is 34 years of age. His disease is said to arise from scurvy and exposure during his Northern explorations. His life has four times been almost despaired of—once in Egypt, from an attack of plague; once in Africa, prostrated by the African fever; once in the Mediterranean, with lock-jaw; and he was dangerously wounded in the Mexican war, while carrying despatches for General Scott between Vera Cruz and Mexico.

OPIUM.—The East India Company's revenue from Opium in the years 1854-5 was £3,125,251.

MORTALITY NOTABILIA.—The deaths in London have exhibited a slow but constant decrease during the four weeks of February. In the week that ended last Saturday the total number registered was 1216. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week, was 1148, which, if raised proportionally to the increase of population, will become 1263. The result shows that the rate of mortality last week was rather below the average.

BIRTHS.—The births of 925 boys and 896 girls, 1821 children, were registered.

METEOROLOGY.—The mean height of the barometer in the week was 30.214 in. The mean reading was above 30 in. on every day from Wednesday the 18th ultimo to the end of the month. The barometer rose so high as 30.40 in. on Saturday. The mean temperature of the week was 41.2°, and was 1.9° above the average of the same week in 43 years. The highest temperature occurred on Saturday, and was 56.9°; the lowest occurred on Wednesday, and was 24.9°. The range of the week was 32°. The mean dew-point temperature was 36.9°, and the difference between this and the mean temperature of the air was 4.3°. Wind very variable; no rain. Horizontal movement of air 205 miles; electricity, positive, with strong tension.

DEATHS IN PUBLIC INSTITUTIONS for the Weeks ending Saturday, February 28 :—

	In the Week ending Feb. 21.			In the Week ending Feb. 28.		
	Males.	Females.	Total.	Males.	Females.	Total.
Workhouses.. .. .	78	66	144	58	79	137
Prisons	2	..	2	..	..	..
Military and Naval Asylums ..	9	..	9	2	..	2
General Hospitals	59	39	98	37	25	62
Hospitals for Special Diseases ..	4	3	6	3	2	5
Lying-in Hospitals .. .. .	..	1	1	1	2	3
Military and Navy Hospitals ..	5	..	5	4	..	4
Hospitals and Asylums for Foreigners .. .. .	..	..	..	..	2	2
Lunatic Asylums	4	4	8	6	4	10
	161	112	273	111	114	225

The following are the number of Deaths from Small-pox, Measles, Scarlatina, Hooping-cough, Diarrhœa, and Typhus, in the several Districts of London, for the past Week :—

	Population.	Small-pox.	Measles.	Scarlatina.	Hooping-Cough.	Diarrhœa.	Typhus.
West.....	376,427	2	5	3	12	2	11
North	490,396	2	9	2	4	4	12
Central ..	393,256	..	5	1	10	3	4
East.....	485,522	..	2	7	16	5	12
South	616,635	1	2	6	11	4	6
Total..	2,362,236	5	23	19	53	18	45

DEATHS REGISTERED in the Metropolis for the Week ending Saturday, February 28, 1857.

		In the Week ending Saturday, Feb. 28, 1857.						Averages of Temperature and Deaths in 10 Weeks.
		Deaths of Persons.						
CAUSES OF DEATH.		AT ALL AGES.	Under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.	At 80 Years of Age and Upwards.	
Mean Temperature		41° 2						40° 0
ALL CAUSES		1216	542	162	215	242	45	1147.7
SPECIFIED CAUSES		1204	541	162	214	242	45	1136.1
DISEASES:—								
1. Zymotic Class		197	151	18	12	14	2	220.5
2. Dropsy, Cancer, and others of uncertain seat ..		51	6	4	17	22	2	47.3
3. Tubercular Class		200	82	64	47	7	..	185.8
4. Of Brain, Nerves, etc. ..		132	69	6	17	35	5	130.9
5. Of Heart, etc.		59	12	11	13	21	2	45.0
6. Of Respiratory Organs ..		304	121	23	66	84	10	251.1
7. Of Digestive Organs		59	22	8	16	12	1	64.7
8. Of Kidneys, etc.		22	3	10	3	6	..	14.6
9. Of Uterus; viz.—Puer- peral Disease, etc.		7	..	4	2	1	..	9.2
10. Of Joints, Bones; viz.— Rheumatism, etc.		6	1	3	..	2	..	8.1
11. Of Skin, etc.		3	..	..	..	2	1	2.1
12. Malformations		4	4	..	..	..	..	3.1
13. Debility from Premature Birth, etc.		32	32	..	..	..	..	27.0
14. Atrophy		32	22	1	2	7	..	28.4
15. Age		48	..	..	..	26	22	55.9
16. Sudden		7	5	1	1	..	..	10.7
17. Violence, Privation, etc...		41	11	9	18	3	..	31.7
CAUSES NOT SPECIFIED.. ..		12	1	..	1	..	..	11.1

TO CORRESPONDENTS.

* * * The COLOURED PLATE which should accompany DR. JENNER'S THIRD LECTURE, will be given in our next publication.

M.P.—Mr. Headlam's Medical Profession Bill of last Session was reported and re-committed on the 10th of June, for the 19th. On the 19th the Committee was deferred till the 23rd of June, then to the 30th, then to the 7th of July, when the Bill was withdrawn. Lord Elcho's Bill, "The Medical Qualification and Registration Bill," was reported

on June 10 without amendment, but was snuffed out by the Prorogation. The number of petitions in favour of Mr. Headlam's late Bill was 752, with 3220 signatures; and against, 56 petitions with 6162 signatures.

Mr. Naves, Mr. Harris, Fiat Justitia, Audi alteram partem, and other gentlemen write to make a correction in a report which appeared of the meeting at St. Thomas's Hospital on Poor-law Medical Reform. We are assured that a Mr. Woakes did not move any resolution—that, being unpopular with his brother Students, he was not allowed to do so; and that the Secretary had made a "substantial alteration" in one of the resolutions carried, though the nature of this alteration is not specified.

Senex.—There are three Medical men in the Lower House of the Australian Legislature.

P. M. O.—We should say, resign at once.

R. R. S.—1. Two ounces of the root to a pint of proof spirit. Macerate fourteen days, and strain. 2. No advertisement has appeared of a second edition.

Non-forceps.—We could not admit the letter without opening our columns to replies, and the subject is one we do not wish to enter upon.

M. D.—The Tobacco Queries shall be adverted to hereafter.

H. W.—We have seen the apparatus for the inhalation of oxygen alluded to by our correspondent at the house of a patient. It appears clumsy and ill-contrived, and the mouth-piece is especially objectionable. We know nothing of the pamphleteer. His qualifications are given in the Directory.

Mr. John Peterson, of Aberdeen, in a letter which the crowded state of our columns prevents us from publishing, urges upon the Legislature the necessity of modifying the present practice of Vaccination, in order to make it a more sure preventive against Small-Pox. He argues, though as it appears to us, upon insufficient grounds, that dry plate Vaccination, especially when clumsily or carelessly performed on, or taken from weak and unhealthy children, is a fruitful source of modified Small-Pox and of other poisonous diseases. We cordially agree with our Correspondent in thinking that there are not many Practitioners in towns and very few in the country, who have time or a sufficient number of cases to keep up a regular supply of fresh and healthy lymph, and that it is necessary, to remedy this and other evils, that well-paid Vaccinators should be constantly employed in performing or superintending the operation, and who should be responsible to the State and to the public for its efficient results. Our correspondent also very properly insists upon the necessity of a personal inspection of the child from whom the lymph is taken; of its abstraction not later than the seventh or eighth day; and of the propriety, whenever practicable, of vaccinating one child immediately from another.

An Admirer of Jonathan cannot expect us to enter upon the question of the "peculiar institution" of America, especially of the Southern States. The following is given as a specimen of the *morale* of Detroit and Michigan. The scraps are to be found in one number of the *Detroit Daily Free Press*:—Advertising "The Great English Remedy, Sir James Clarke's Celebrated Female Pills," the following appears in italics:—"These Pills should not be taken by females during the first three months of pregnancy, as they are sure to bring on miscarriage; but at any other time they are safe."—Just underneath this, Dr. Duponce's French Pills are advertised, in which it is stated that "These Pills are for the alleviation of those suffering from any irregularities whatever, as well as to prevent pregnancy to those ladies whose health will not permit an increase of family. Pregnant females, or those supposing themselves so, are cautioned against using these Pills while they are pregnant, as the proprietor assumes no responsibility after the above admonition—although their mildness would prevent any mischief to health; otherwise these Pills are recommended."—In the same page, again:—"Notice to Ladies.—Married Ladies, who, from any just cause, deem it prudent to prevent conception, are earnestly recommended to peruse carefully the pages of Dr. Goff's New Book, as they will there find a clear exposition of the manner in which they can have their wishes gratified, without additional expense or trouble." "Dr. Goff's Female Monthly Pills.—Ladies should not use them during pregnancy, as they will produce miscarriage." And once more we have another puff of "The only genuine Female Pills sold in the United States," which closes as follows:—"N.B.—Married ladies who have reason to believe themselves in the family-way should not use them, as, by their action on the womb, miscarriage would be the consequence."

Dr. Fleming's letter shall be inserted next week.

MEDICAL STUDENTS' BALL.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—A meeting of the Students of the Charing Cross Hospital Medical School having been convened, it was unanimously agreed publicly to state that the Ball which took place at the Adelaide Gallery under the above title was neither proposed, attended, nor sanctioned, by the gentlemen connected with this School. Your insertion of the above will greatly oblige. I am, &c. AUGUSTUS O. APPLIN, House-Surgeon.

Charing Cross Hospital, March 3, 1857.

Dr. Rose's case shall appear, and that of *Mr. Graham* and *Mr. Witten*, as soon as possible.

T. W.—The expenses of the Coroners of the County of Northampton, for the year ending September, 1856, were £868 14s. 5d.

Mr. Jones's paper is delayed, as the woodcut is not ready.

POTT'S CURVATURE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will you, or some one of your correspondents, kindly inform me where I may find an account of the disease commonly known as Pott's Curvature (angular curvature backwards, in Mr. Pott's own words)? My edition of "The Chirurgical Works of Percival Pott," in two volumes, published in 1778, while containing most of what is still valuable in the writings of that eminent surgeon, does not mention the spinal curvature which still retains his name. I am, &c. HIBERNIENSIS.

Hiberniensis will find Pott's account of Spinal Curvature in the paper in the third volume of his Chirurgical Works (1783), bearing the following title, "Remarks on that Kind of Palsy of the Lower Limbs, which is frequently found to accompany a Curvature of the Spine."

A Country Subscriber should consult the works of Taylor and Beck.

Dublin.—We have no list of the writings of Dr. J. Johnson.

Mr. Hall, Sheffield.—Received with thanks.

Paracelsus.—We can assure our Correspondent that no such paragraph as that which he has sent us, and which it appears forms part of an advertisement, by "Dr. John Sutton, alias Hall, alias Mauning," of 10, Goswell-road, has appeared in the *Medical Times and Gazette*. The said Doctor, by his own confession, has falsely represented himself as an M.R.C.S., as Paracelsus may see by referring to p. 206.

Lectures and papers are in type from Mr. Huxley, Mr. Toynbee, Mr. Jones, Jersey, Mr. Fox, Mr. Holmes Coote, Mr. Madden, Mr. Raynes, Dr. Lees, and Mr. Wilkinson. They shall appear forthwith.

COMMUNICATIONS have been received from—

Dr. McWILLIAM; Dr. MURPHY; Mr. HALL; HIBERNIENSIS; Mr. TYNDALL; Mr. MAURICE; SECRETARY OF ROYAL INSTITUTION; AN IRISH SURGEON; Dr. FILAMET; Mr. KIRBERGER; Dr. FLEMING; Dr. ROSE; Mr. GRAHAM; Mr. BIRD; Mr. WITTEN; Mr. JONES, Jersey; Mr. EVANS; Mr. M'DERMOTT; Dr. GEDDES; Mr. MAXWELL; NON-FORCEPS; Mr. CLARK; Dr. H. WEBER; MESSRS. LEGGATT, HAYWARD, and LEGGATT; Dr. PRIESTLEY; Mr. SADLER; Dr. DRUITT; Mr. DRAPER; Dr. WOOD; Mr. LIZARS; Mr. H. G. WOOTTON; Dr. FOWKE; Mr. PINDER; Mr. ATKINSON; Mr. HAMMOND; Mr. CHAPMAN; Mr. ARCHER; Dr. GIBB; Mr. HALL; Mr. WHITE; Mr. PAGET; Dr. BRISTOWE.

APPOINTMENTS FOR THE WEEK.

7. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; Westminster, 1 p.m.; King's, 2 p.m.; Charing Cross, 1 p.m.
MEDICAL SOCIETY OF LONDON, 8 p.m.: Dr. Grailey Hewitt, "On the Diagnosis of Apneumatosis" (pulmonary collapse). General Meeting for Election of Officers and Council at 7 p.m.
ARMY MEDICAL AND SURGICAL SOCIETY, 8 p.m.: Staff-Surgeon Matthew, "On the late Epidemic of Cholera in the Island of Madeira."
ROYAL INSTITUTION, 3 p.m.: Professor Phillips, "On the Origin and Progress of Life on the Globe—Vertebrata."
ROYAL BOTANIC SOCIETY, 3½ p.m.

9. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.; Orthopaedic Hospital, 3 p.m.

10. Tuesday.

Operations at Guy's, 1 p.m.
ROYAL COLLEGE OF SURGEONS, 4 p.m.: Professor Busk.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m.: Mr. Thomas Bryant, "On the Pathology of Articular Cartilages;" Dr. Bence Jones and Mr. Howship Dickinson, "On the Effect produced on the Circulation by the long-continued action of cold water externally." [There is some uncertainty about the papers to be read, but the above two are the most probable.]
ROYAL INSTITUTION, 3 p.m., Prof. Huxley, "On Physiology—Locomotion."
ZOOLOGICAL SOCIETY, 9 p.m.

11. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.
Orthopaedic Hospital, 3 p.m.
ROYAL COLLEGE OF PHYSICIANS—Croonian Lectures, 4 p.m.: Dr. Owen Rees, "On some Points relating to the Pathology of Urinary Affections."
NORTH LONDON MEDICAL SOCIETY, 8 p.m.
GEOLOGICAL SOCIETY OF LONDON, 8 p.m.
ETHNOLOGICAL SOCIETY, 8½ p.m.

12. Thursday.

Operations at St. George's, 1 p.m.; Middlesex, 12½ p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.
ROYAL COLLEGE OF SURGEONS, 4 p.m.: Professor Busk.
UNIVERSITY COLLEGE MEDICAL SOCIETY, 8 p.m.: Mr. T. Howkins, "On Smoking."
ROYAL SOCIETY, 8½ p.m.
ROYAL INSTITUTION, 3 p.m.: Professor Tyndall, "On Sound."

13. Friday.

Operations at the Moorfields Ophthalmic, 10 a.m.; Westminster Ophthalmic, 1½ p.m.
ROYAL COLLEGE OF PHYSICIANS—Croonian Lectures, 4 p.m.: Dr. Owen Rees, "On some Points relating to the Pathology of Urinary Affections."
ROYAL INSTITUTION, 8½ p.m.: Professor Phillips, "Geological Sketches round the Malvern Hills."

ORIGINAL LECTURES.

LECTURES

ON

GENERAL NATURAL HISTORY.

By THOMAS H. HUXLEY, F.R.S.,

Lecturer on General Natural History at the Government School of Mines,
and Fullerian Professor of Physiology, Royal Institution.

LECTURE X.

(Continued from page 183.)

WE must now turn to the structure and arrangement of the internal organs of *Astacus*. And we may first take the alimentary organs into consideration. The mouth of the crayfish is a wide aperture, situated between the labrum in front, the metastoma behind, and the mandibles on each side, which serves as the entrance to an equally wide œsophagus—a short tube with plaited walls, which takes a slightly curved direction upwards and a little forwards, to open into the large stomach, which is not only situated directly over, but extends forwards in front of the gullet. The stomach, in fact, occupies almost the whole cavity of the body in front of the cervical suture, and is divided by a constriction into a large anterior moiety, the cardiac division, and a small posterior, pyloric portion. The anterior half of the cardiac division has the form of a large membranous bag, whose inner surface is closely set with minute hairs; but in the posterior half of this, and on the whole of the pyloric division, the walls of the stomach are

FIG. 3.



Upper Figure—Longitudinal Section of Stomach—*Astacus*.—A. Anterior gastric muscle. B. Posterior gastric muscle. ca. Cardiac ossicle. ca'. Its posterior process. u. Uro-cardiac, with its tooth. m p. Mesopyloric. The oblique bar, extending from the end of the uro-cardiac to the mesopyloric, is the prepyloric ossicle. pt. Ptero-cardiac. sc. Supero-lateral cardiac, with its great tooth, c c'. l. Small inferior tooth. c. Cardio-pyloric valve. b. Infero-median pyloric ridge. a. Lateral pyloric ridge. d. Superior pyloric ridge. u p. Uro-pyloric ossicle. x y. Line of section; the anterior face of the posterior segment being shown in the lower figure.

strengthened by a very peculiar arrangement of cartilaginous(a) and calcified plates and bars articulated together, which are

(a) i. e. in consistency.

developed as thickenings of the chitinous membrane (which here, as in other *Articulata*, replaces and represents the epithelium of the alimentary canal), and constitute the well-known gastric skeleton. The most important part of this apparatus is that which is developed in the posterior cardiac region. It consists, in the first place, of a transverse slightly arcuated "cardiac" plate, cartilaginous anteriorly and calcified posteriorly, which extends across the whole width of the roof of the stomach, and articulates at each extremity with two small curved triangular "ptero-cardiac" ossicles. On each side a large elongated "supero-lateral" ossicle, wider posteriorly than anteriorly, is connected with the lower end of the ptero-cardiac ossicle, and passing upwards and backwards articulates by the anterior part of its hinder extremity with a small transverse arcuated rod, situated at the anterior boundary of the pyloric portion—the "pyloric" ossicle. The posterior part of the hinder extremity of the infero-lateral piece takes on a cartilaginous consistence, and becomes continuous with a broad elastic plate representing the "mesopyloric" ossicles of other *Crustacea*, and continuous with the pyloric ossicle in front.

These pieces, it will be observed, form a sort of hexagonal frame, whose anterior and lateral angles are formed by moveable joints, while the posterior angles are united by an elastic mesopyloric plate.

From the middle of the cardiac piece a strong cartilaginous process passes backwards and downwards, becomes calcified, and, under the mesopyloric cartilage, terminates in a broad, thickened extremity, which inferiorly presents two strong, rounded tuberosities, or "cardiac" teeth. A narrow, uncalcified band connects the end of this process with a quadrate, calcified ossicle, which bears a strong bifid tooth on the middle of its inferior face. These are the "uro-cardiac" ossicle and tooth. Finally, connected in a similar manner with the end of the uro-cardiac piece, is a broad "prepyloric" ossicle, which passes obliquely upwards and forwards, and unites with the pyloric ossicle, thus forming a kind of elastic diagonal brace between the uro-cardiac and pyloric ossicles. The membrane of the stomach is so continued from the edges of the pre-pyloric to those of the uro-cardiac and supero-lateral ossicles as to form a kind of pouch, with elastic sides, which act, to a certain extent, as a spring, tending to approximate the inferior face of the pre-pyloric to the superior face of the uro-pyloric ossicle.

The result is, that there is a certain position of equilibrium in the whole apparatus, when the uro-cardiac and pre-pyloric pieces make a small angle, and the cardiac and ptero-cardiacs, ptero-cardiacs and supero-lateral cardiacs respectively, make a large angle with one another, and the apparatus tends to assume this position when undisturbed. Two pairs of powerful muscles are attached; the anterior pair, to the cardiac cartilage and the procephalic processes, the posterior, to the wide posterior part of the supero-lateral pieces, and to the carapace immediately above and behind them.

I have been unable to make these muscles contract in recently-opened animals, but from their attachments it is clear that their action must, in a general way, resemble that produced by pulling upon the cardiac and pyloric pieces when the stomach is removed from the body. Now the result of doing this is that the uro-cardiac tooth moves downwards and forwards, while the lateral cardiac teeth are driven a little inwards and backwards, and the grinding surfaces of the three come into contact with a force proportional to that exerted in traction. On ceasing to pull, the apparatus returns to its former position, its movements being facilitated by the elastic connexion of the uro-cardiac and pre-pyloric ossicles on the one hand, and by the looseness of the membrane uniting, the ptero-cardiac, cardiac, and supero-lateral cardiac ossicles on the other. Nothing can be more easy than to perform the experiment, and to convince oneself that these teeth do really constitute a most efficient masticatory apparatus; and, therefore it is not a little surprising to find Oesterlen, in his elaborate essay on the stomach of *Astacus*, questioning the crushing action of these teeth.

A great bilobed valvular process rises up from the ventral part of the stomach, opposite the cardio-pyloric constriction, and apparently prevents the food from passing into the pylorus until it is properly comminuted. And in front of this valve the infero-lateral parietes of the stomach are strengthened by a number of other plates and bars; one of which, the lateral cardiac ossicle, bears a small tooth. There are, therefore

altogether five cardiac teeth, one median, and two lateral on each side.

In the pylorus the food has to undergo a further series of comminutions and strainings. A ridge covered with long hairs projects in the median line above; other hairy ridges extend inwards from the sides to meet it, and nearly close the passage laterally. These ridges are very convex inferiorly, and their convexities abut against the concavities of an inferior median ridge, which rises up to meet them, and is prolonged posteriorly into a sort of valvular process, covered at its termination with long hairs, which bar the space left between the upper part of the lateral ridges. The concave faces of this median process are covered by close-set parallel ridges, which only become free hair-like processes at the posterior margin of the plate, each ridge giving attachment to a regular series of minute hairs. These are directed inwards nearly parallel with the surface, which looks at first as if it were merely ruled with close-set transverse lines, connected by still finer and closer longitudinal ones.

This apparatus constitutes the "ampoule cartilagineux" of Milne-Edwards. Behind it there is yet another infero-median, and two lateral setose, valvular prominences, which form the last barrier between the food and the intestine.

The pyloric portion of the stomach passes into the anterior portion of the intestine, which is smooth internally, and presents superiorly a cœcal process, the remains, as Rathke has shown, of one lobe of the vitellary sac of the embryo.

This anterior portion of the intestine is, however, very short, and almost immediately becomes dilated into the wider

continued into a corresponding number of series of papillæ along the rest of the intestine.

The only glandular apparatus of any kind which opens into the alimentary canal is the liver, the apertures of whose wide ducts are seen on each side of the pylorus. Each duct conveys the secretion from the multitudinous cœcal tubes, which constitute the principal mass of the corresponding bilobed half of the liver. The two halves lie on each side of the stomach, and, though they remain perfectly distinct from one another, come into close contact below.

Astacus possesses neither salivary glands nor any cœcal appendages to the intestine, such as exist in the *Brachyura* and some *Macrura*, unless the short cœcum just now described is the homologue of the long cœca of *Maia* and *Homarus*.

In the spring and summer two very curious discoidal calcareous plates, the so-called "eyes" of the crayfish, are found imbedded in the walls of the dilated anterior portion of the cardiac division of the stomach, the middle of whose lateral surface they occupy. These bodies commence as calcareous deposits underneath the chitinous gastric lining, and increase in size until the period at which the crayfish casts its skin arrives. They are then cast, together with this lining membrane and the gastric armature; and it would appear that, like the latter, they become broken up and destroyed within the new stomach. The purpose of these concretions is not understood; the ordinary theory, that they are stores or calcareous matter, ready to be distributed through the young integument after ecdysis, appearing to be negatived by their small size. Oesterlen states that they rarely weigh more than two grains, and excellently suggests, that if it be admitted that the crayfish can derive all the calcareous matter it requires, except two grains, from other sources, it is hardly necessary to look on those two grains as a special supply.

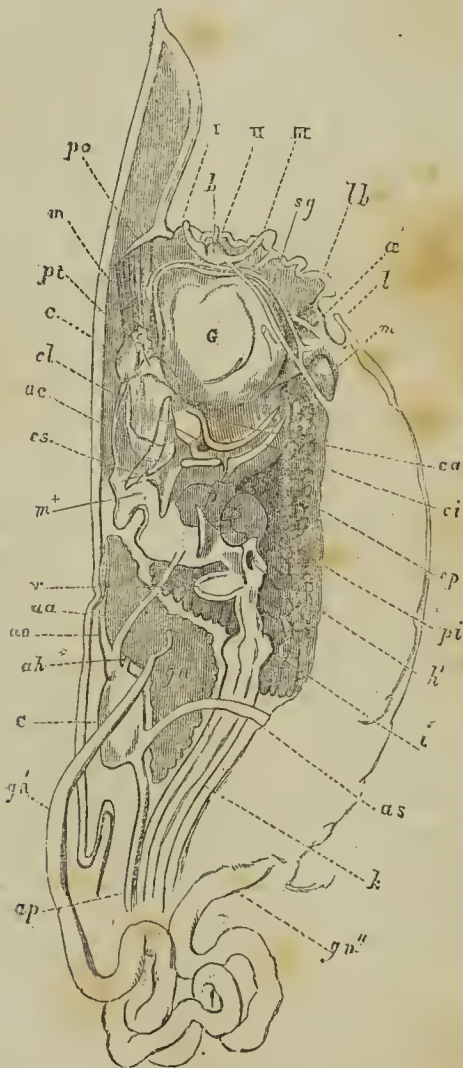
The circulatory apparatus of *Astacus* is well developed. The heart has the shape of an irregular polygon, and lies immediately behind the stomach and beneath the cardiac region of the carapace, in a chamber which is commonly, though improperly, termed the "pericardium," to whose walls it is attached by six ligaments, corresponding with the alæ of the heart in insects, but not, like them, muscular. Except by these ligaments, and by the arteries, which pass through it, the walls of the pericardial cavity, or blood sinus (for such it really is), are wholly unconnected with the heart, which thus is, in a manner, suspended freely in the blood.

Six apertures, two of which are superior, two inferior, and two lateral, provided with valves, which open inwards, allow the blood to enter the cavity of the heart during the diastole, and prevent its egress, except by the arteries, during the systole. The arterial trunks are six in number, five being given off anteriorly, and the other from the posterior portion of the heart.

Of the five anterior arteries one, the ophthalmic, is single, and situated in the middle line; it passes forwards on the stomach to the head, where it supplies the eyes and antennules. The other arteries are in pairs; two pass on the stomach forwards and outwards, giving off branches to the carapace, and eventually supplying the antennæ; the other two pass downwards between the anterior lobes of the genitalia, and divide into a multitude of branches upon the hepatic cœca.

The posterior trunk, or sternal artery, is the largest of all, and presents a sort of bulbus arteriosus at its commencement. It turns almost directly downwards, usually on the right side of the intestine, to the sternal canal, which it enters, passing between the antepenultimate and penultimate thoracic ganglia to the lower surface of the ganglionic cord; but before doing so it gives off two abdominal branches, one superiorly, which traverses the middle of the tergal region above the intestine, the other inferiorly, which takes a corresponding course along its sternal region. The arterial trunks are provided with valves at their commencement, so arranged as to prevent the regurgitation of the blood. They ramify minutely, but how far a capillary system can be said to exist, is a question requiring further investigation. In the transparent *Zoeæ*, which are the larvæ of decapodous *Crustacea*, I have plainly observed the abrupt termination of the arterial trunks by open mouths, through which the blood is poured into wall-less lacunæ, and into the general cavity of the body; nor can there be the least doubt that a similarly lacunar condition of the circulation exists in those lower adult *Crustacea*, whose transparency allows of their examination with the requisite powers of the microscope. The probability is that a similar

FIG. 4.



Astacus, Longitudinal Section.—I. II. III. Sterna of first, second, and third somites. *a*. Œsophagus. *lb*. Labrum. *l*. Metastoma. *G*. Membranous part of stomach. *c*. Cardiac ossicle. *pt*. Pterocardiac. *cl*. Supero lateral cardiac. *uc*. Uro-cardiac. *cl*. Lateral cardiac. *p*. Cardio-pyloric valve. *pi*. Inferior pyloric valvular apparatus. *m*. Anterior gastric muscle. *m'*. Insertion of posterior cardiac muscles. *pc*. Procephalic lobes. *h*. Hepatic duct. *v*. Pyloric cœcum. *ik*. Intestine. *gn*. Testis. *gn'*. Vas deferens. *C*. Heart. *ao*. Ophthalmic artery. *aa*. Antennary. *ah*. Hepatic. *as*. Sternal. *ap*. Superior abdominal. *sq*. Stomato-gastric nerve.

posterior division, which extends to the anus. The inner surface of the dilatation is produced into six ridges, which are

state of things obtains in the vascular system of all other *Crustacea*, and that after undergoing a greater or less amount of subdivision, the arterial vessels, or their capillary continuations, cease to exist, the blood then making its way into lacunæ between the organs, and into the general perivisceral cavity; and, as in the *Mollusca*, ceasing to be contained in vessels with distinct walls.

The blood thus poured out, eventually makes its way into irregular sinuses or reservoirs, the chief of which, lodged in the sternal canal, communicates by lateral channels with the others which lie above the bases of the thoracic appendages, and from which the "afferent branchial" canals pass into the stems of the branchiæ, on whose exterior face they ascend, giving off branches to the lateral filaments. Corresponding canals return the blood from these filaments to the "efferent branchial" canals, which run down the inner side of the branchial stems, and unite above the bases of the limbs into trunks, altogether six in number, according to Krohn, which ascend beneath the epimera and open into the sides of the pericardial sinus. The floor of this sinus is formed by a continuous membrane, which appears to shut it off completely from the general visceral cavity (at least it retains air or fluid thrown into it), and, if this be really the case, it may be said to be functionally a branchial auricle, containing pure and unmixed aerated blood.

The branchiæ are eighteen in number upon each side, and are attached from the eighth to the fourteenth somites inclusively. Six of these branchiæ are attached to the epipodites of the eighth to the thirteenth somites, and differ very considerably in appearance from the other twelve. Each epipodite is, in fact, expanded at its upper extremity into a broad, bilobed membrane, which is folded upon itself, so that the two lobes are directed posteriorly, and receive the epipodite which lies behind them. The membrane of the lobes is obliquely plaited, so that, doubtless, they subserve respiration to a certain extent; but, in addition, the anterior edge of the epipodite is beset with a number of branchial filaments, similar to those on the other branchiæ.

The latter are simple plumes, consisting of a stem, giving off many delicate, cylindrical filaments. Two of these plumes are attached to the epimera and coxo-epimeral articular membranes of the ninth, tenth, eleventh, twelfth, and thirteenth somites. They increase in size posteriorly. The eighth and fourteenth somites, on the contrary, only carry one plume.

The respiratory organs of the *Crustacea*, not being provided with cilia, require some special arrangement for the renewal of the water with which they are in contact, and this object is attained principally by the action of the scaphognathite, which lies immediately behind the anterior opening of the branchial chamber, and during life is incessantly in motion, baling out, as it were, the water which has become impure through the anterior opening, and thus compelling the flow of fresh fluid into the branchial chamber through its posterior and inferior opening, constituted by the space left between the lower edge of the branchiostegite and the bases of the limbs.

The essential parts of the reproductive organs in the male and female *Astacus* are very similar to one another in form, both ovarium and testis having the figure of a trilobed gland, situated immediately behind the stomach, and below the heart. Two of the lobes are applied together, and pass forwards, the other lobe is directed in middle line backwards. The ducts take their origin, one on each side, at the junction of each antero-lateral with the posterior lobe.

In minute structure, however, the two organs differ widely. Each lobe of the testis is composed of a number of minute cœca, in which the spermatozoa are developed, and which open into a central duct. The ovarium, on the other hand, is essentially a wide sac, produced into three large cœca, each of which corresponds with a lobe; and the ova are developed in the epithelial lining of the sac. The efferent ducts again have little resemblance, the oviducts being short, wide tubes which open on the coxopodites of the antepenultimate thoracic appendages, while the vasa deferentia are canals as long as the body, at first very narrow, but afterwards widening, which lie coiled up on either side of the posterior part of the thoracic cavity, where their white contents make them very conspicuous, and eventually open in the coxopodite of the posterior thoracic appendages.

(To be continued.)

ORIGINAL COMMUNICATIONS.

ON THE TREATMENT OF VARICOSE VEINS BY THE APPLICATION OF CAUSTIC ISSUES.

By HOLMES COOTE, F.R.C.S.

Assistant-Surgeon to St. Bartholomew's Hospital.

I do not profess to offer any new suggestions upon the subject now before me, but I beg merely to point out a few facts which have not, in my opinion, received sufficient consideration in the pathology and treatment of varicose veins. When, after death, the integument of the lower extremity is reflected from the limb so affected, the subcutaneous veins are found, as usually described, dilated and tortuous, often sacculated, and with thickened walls; the diseased vessels may spread wholly or partially round the limb, and will very frequently be found to consist of many layers extending much more deeply than first appears. This is more especially the case from the knee downwards; and I do not hesitate to affirm, that in very many apparently simple cases a careful dissection would expose an amount of disease sufficient to astonish one who had never before adopted this method of investigation. As the subcutaneous fat is removed, layer after layer of veins is exposed, the whole forming a close network of tubes closely communicating with one another. If two, three, or four tubes were obliterated, the blood might still find ready channels for gravitation or circulation; and smaller veins would rapidly enlarge, to compensate for any temporary obstruction.

On these grounds I consider the practice of obliterating the large venous trunks by an operation now commonly recommended—namely, by compressing the vessel at various points, by passing a harelip pin underneath it, laying a piece of wax bougie upon it, and then applying the twisted suture around the pin and over the bougie—as likely to prove insufficient; for by no means can the operator be sure that he had satisfactorily cut off all channels of communication. The method by which such an operation must act, to prove successful, would be by exciting inflammation of subacute character throughout the veins in the neighbourhood, thus leading to their obliteration. This end is attained far more safely and satisfactorily by the application of caustic issues, a practice which has been strongly insisted on by Mr. Skey for very many years; who has shown, I think satisfactorily, that when pursued carefully, and with a proper knowledge of the ends to be attained, it is greatly superior to any other mode of treatment at present known. So far back as 1842, I saw a female domestic, of 42 years of age, in whom the veins of the right lower extremity were enlarged and tortuous from the foot up to the popliteal space, where they formed a tumour, situated towards the inner side of the limb, considerably larger than a man's closed fist. The patient complained of numbness and want of power in the affected limb, and of inability to go up and down stairs. Five caustic issues were put over the mass of distended veins about the knee, where they produced the usual effects; namely, some inflammation of the integument, easily controlled by simple measures; gradual thickening and hardening of the dilated veins, coagulation of the contained blood, and, finally, the obliteration of the circulation in the diseased parts. Ultimately the swelling subsided, and at the expiration of six months the patient called upon me to show that she was, in her own words, perfectly recovered.

But I must remark that this end is not obtained by making necessarily a series of deep eschars; on the contrary, the eschars may be very small and very superficial, and it is by attending to this rule that danger of any unpleasant complication is avoided. I have had of late a very considerable number of cases, both male and female, under my care in St. Bartholomew's Hospital, and in no instance has any unpleasant symptom manifested itself. I use the powder usually recommended, namely, three parts of quick lime, and two of caustic potash, made into a paste with spirits of wine at the time of its application. Great care should be taken that the materials are good and pure. A thin layer is laid upon the part to be cauterized, the size of the issue being determined by a hole cut into adhesive plaster, which is

applied to the skin. This hole need not be larger than a split pea or a fourpenny piece, for it is found that the action of the caustic is always greater and more extensive than first appears. In from ten to twenty minutes, according to the purity of the materials employed, the pain which the patient experiences gives indication that the caustic has done its work. Upon the removal of the paste there is exposed a small ash-coloured slough, which becomes hard and black by exposure to the air. In four or five days the eschar begins to separate by a process of ulceration, which goes on for a considerable and variable time, making the issue very much larger than the Surgeon contemplated. It may attain the size of a shilling, when it heals, generally very slowly, in the usual way by granulation and cicatrization. I have seen the issue enlarging while the surface has been granulating, but the patient has been free from pain. The effect of the issue is to cause the mass of veins in its vicinity to become permanently obliterated; while the eschar is separating the hardening of the veins is felt more and more, the vessels, whose walls are still soft and elastic, collapse, and the limb resumes its natural colour and form. The issues must not be applied too closely one to another, for the subsidence of swelling causes the skin to contract, and the open spots upon which the caustic has acted become greatly approximated. Were they to ulcerate into one, a troublesome little sore might result, and no good end would be obtained from the infliction of a greater amount of cauterization than necessary.

I have never seen any evil result, but Mr. Lloyd informs me, that he witnessed one case in which the vein was opened by ulceration, and a severe attack of hæmorrhage, followed by phlebitis, ensued. I am not acquainted with the particulars of this case. The only troublesome consequences which have resulted in the cases under my care have been; considerable inflammation in the skin, about the issue, followed by a sort of erysipelatous redness, and some temporary swelling of the glands in the groin; a painful state of the issue accompanied by ulceration of the subjacent parts; a tedious process of cicatrization. But perhaps the slower the progress of the issue, the more complete the obliteration of the veins, and the more perfect the cure. Some judgment is required in the selection of spots for the issues. As a general rule, the patients require good food, and, not uncommonly, some tonic medicine such as cinchona or quinine. I must confess that the cases have gone on better when generous diet has been allowed, but at the same time the surgeon's judgment must be exercised according to the features of each particular case. It cannot answer any good purpose to administer stimulants and full diet to all patients labouring under this disease without discrimination. During the past three months there have been treated eighteen cases of the varicose veins of the lower extremity upon the principle of caustic issues in one of the surgical divisions of the hospital. It would be tedious to narrate the particulars in each instance; inasmuch as the progress was nearly similar in all. There was no hæmorrhage in any, save one case, where the patient lost in one night about three or four ounces of blood during the separation of the slough. She had been on meat diet, and indulged with porter both before and after the application of the caustic. Had a different course been adopted, this accident might probably have been avoided.

The following case, at present in the Hospital, may serve as a type of the rest.

M. J., aged 56, married and the mother of five children, states that thirty years ago the veins in both legs swelled during the later months of pregnancy. She did not, however, suffer any great inconvenience until ten years ago, when the enlargement became very much more considerable. Upon two occasions the veins burst near the ankle, when she lost a very considerable amount of blood. There is a large sore upon the right leg. In both legs the swelling is most considerable about the middle of the thighs and the upper third of the leg, where the veins are very numerous, some apparently the diameter of the middle finger of a man's hand.

August 21.—Six issues were made with the caustic paste upon the most prominent parts of the swellings in the left leg. The action of the caustic was allowed to continue twenty minutes. The pain was considerable, and occurred at intervals during the day and night.

22.—There was considerable redness about the issues, and the limb felt hot and painful. Ordered an aperient draught. Cold lotion to the limb.

23.—The veins already feel hard.

September 10.—The eschars are separating: the obliteration of the veins is progressing favourably.

Issues were directed to be applied to the dilated veins on the opposite limb.

October 1.—The veins are hardened under the issues, and no further application of caustic appears to be necessary. The eschars are separated, and have left healthy granulating surfaces. The sore on the right leg is healing.

I have mentioned this case inasmuch as the patient is at the present moment in the Hospital; and I may observe that in ordinary cases the patient's stay in Hospital lasted one month or six weeks. After their discharge perhaps a second month was required before the limb regained its normal strength.

Norfolk-street.

SERIES OF CASES ILLUSTRATIVE OF DISEASES OF THE ABDOMEN, AND ESPECIALLY OF THE DIAGNOSIS AND TREATMENT OF ABDOMINAL TUMOURS AND INTUMESCENCE.

By CHARLES J. HARE, M.D. Cantab., L.R.C.P.
Assistant-Physician to University College Hospital, etc.

HYDRONEPHROSIS.

(Continued from page 235.)

The case of which I have above given the particulars offers a well-marked example of hydronephrosis—a form of renal disease to which the terms, “dropsy of the kidney,” “dilatation of the kidney,” and “hydro-renal distension,” have been applied, though the last of these names (etymologically, very applicable to the disease under consideration), was first used by Dr. J. Johnson with reference to an undoubted instance of pyelitis (a).

The history of the patient and the physical condition of her abdomen on the different occasions when I saw her, present several points of considerable interest. When I examined her at the commencement of 1855, she was suffering from dull aching pain in the right loin, but she was free from the more acute pain which occurred during the “attacks,” of which she gave a good and clear description. In the part to which she referred the pain, I found distinct evidence of a tumour of considerable size; there was dulness on percussion extending round from the spine as far as the outer part of the right antero-lumbar region, (b) and a mass could be felt there, the anterior border of which was evidently overlapped by intestine: but she assured me that the tumour then was very much smaller than when the severe attacks of pain were present, and, indeed, she considered herself, for the time, free from the “lumps” which she had described to me as being sometimes present.

What was the nature of the tumour? Clearly it was not the liver: the edge of this viscus had been found on percussion to extend very little below the costal cartilages, and there

(a) Medico-Chirurgical Journal and Review, 1816, vol. ii. p. 10.

(b) The regions into which, for the sake of facilitating description, the abdomen is usually divided, are sufficiently convenient with the exception of those denominated respectively the *right* and *left lumbar regions*. Under these terms is included the whole of the middle zone of the abdomen, with the exception of the umbilical region; so that each lumbar region includes a portion of the anterior part of the abdomen as well as the whole of its lateral and posterior surfaces (situated between the ribs above and the crest of the ilium below) as far as the spine. For the purpose of obtaining still further precision in description and conciseness of expression I usually divide each of the so-termed lumbar regions into “posterior,” “lateral,” and “anterior:” the *latero-lumbar region* is defined by a prolongation downwards as far as the ilium, of the imaginary lines which bound the axillary region, anteriorly and posteriorly; the *postero-lumbar region*, therefore, extends backwards from the latero-lumbar region, as far as the spine; and the *antero-lumbar region* includes that portion of the parietes between the latero-lumbar and the umbilical regions.

With regard to the terms “level” and “line”—I always use the former with reference to the transverse or horizontal direction, the latter with reference to the vertical direction: thus, if any tumour, etc. were described as being situated at the “median—” “nipple—” or “mid-sterno-nipple-line,” &c., it would be implied that it was situated in the course of a line drawn vertically, from the middle of the sternum, from the nipple, or from midway between the sternum and the nipple, &c.; if described as being at the “level of the umbilicus,” at the “nipple-level,” &c., the expression would mean that the object was to be found in the course of an imaginary line drawn horizontally through the umbilicus, the nipple, &c.

was a considerable resonant space between it and the upper part of the tumour in the antero-lumbar region: nor on the supposition of the liver, could the varying size of the swelling be readily accounted for. The position of the tumour was too high, and was felt too distinctly in the lumbar region to be accounted for by the presence of Typhlitis or Perityphlitis; similar considerations, and the resonance which existed in the lower part of the abdomen, excluded the supposition of ovarian and several other forms of disease. But the tumour occupied exactly the situation in which an enlarged kidney is usually found, and all the physical signs tallied with, and were explicable by, the supposition that we had to deal with a diseased condition of that viscus, while no other view was in accordance with the previous history of the patient or the physical condition of the abdomen. It has already been stated that on many previous occasions the swelling on the right side of the abdomen had been much larger than when I saw it, and that the diminution had often taken place suddenly. I have seen the sudden spontaneous disappearance of other tumours, and once witnessed the subsidence, for a while, of a large ovarian cyst owing to the emptying of its contents through the intestinal canal; but in the case under consideration it was distinctly stated that the disappearance of the tumour was accompanied with the voidance of a large quantity of clear urine. The bladder itself may become enormously distended, so as to rise considerably above the level of the umbilicus, but in the case of Mrs. M., the tumour when largest, was described as existing to the right of and not beyond the median line, and as not reaching to within some distance of the pubes. There could be no doubt, therefore, that the fluid had been retained within the distended kidney, and thus given rise to the pain, swelling, and other symptoms; and its discharge to the sudden diminution (or, as the patient termed it, "disappearance") of the tumour. The fact of the urine being "always" clear, served at once to distinguish the case from one of pyelitis.

It is a matter of regret to me that I had not the opportunity of seeing the patient at any period when the kidney and its pelvis were fully distended with fluid; so that I am unable myself to confirm her statement relative to the sensation communicated to the hand, being that of two distinct tumours. She said that one first appeared a little to the right of the umbilicus, and subsequently another in addition near the costal cartilages. It may be that the first, the lower, swelling was felt when the pelvis of the kidney was only partially filled with fluid; but that, as it became more distended, the swelling occupied (as it naturally would do) a higher position in the abdomen. Very frequently, when a kidney is much enlarged, the colon becomes so placed in front of it as to give very strongly indeed the impression of there being two separate tumours; for the colon forms a yielding, resonant band, while on each side a resisting substance, quite dull on percussion, may be felt,—a very important fact, first clearly pointed out, so far as I am aware, by Dr. Bright, in his valuable papers in the Guy's Hospital Reports. It is right, however, to say that in this case, when the post-mortem examination was made, the ascending colon was found lying close to, but not upon, the distended kidney—so as not to have been likely to give rise to the impression just referred to.

When the patient was seen by me, about nine months subsequently to my first examination, her abdomen, as already stated in the narrative of the case, presented a very different condition from what it had done before. The tumour on the right side occupied less space than previously, and corresponded in position and size (see woodcut, October 16) exactly with the *solid* portion of the mass found after death. On the left side of the abdomen, where no trace of tumour or swelling was before detectable, a large, slightly yielding, somewhat elastic mass was felt, which again, in the progress of her disease, disappeared. The tumour of the right side recurred several times, and, on the last occasion, was persistent up to the period of her death; for some time previously to which she had scarcely passed any urine whatever.

The *post-mortem* appearances coincided thoroughly with the results of the physical exploration of the abdomen during life. The pelvis of the right kidney was immensely dilated, and the kidney substance itself was so much augmented as to weigh 11 ounces; so that, when the pelvis was free from urine and collapsed, a solid tumour must necessarily have existed in the latero-lumbar region. On the other hand, of the glandular substance of the left kidney probably not three-

quarters of an ounce remained; so that, when the large sac formed by its pelvis, etc. was empty, it lay covered by the intestines, without the possibility of giving rise to any physical signs.

Judging from the symptoms only, it is difficult to determine when she first began to suffer from the kidney affection. At the age of 12, and for some years afterwards, she had much pain in the left renal region; and it is to be remembered that the left kidney was the one most disorganized, the right one having, probably, become hypertrophied, to compensate in some measure for the inefficiency of the other one.

But, from examination into the cause which obstructed the flow of urine along the ureters, I am inclined to believe that it was congenital. No calculus existed in any part of the urinary organs; there was no tumour of any kind, except those formed by the kidneys themselves; there was, indeed, no other cause detectable for the obstruction to the flow of urine, but the coiling of the ureter which I have described. It was a sufficient cause; because, while it existed, very firm pressure with the hands, even when the distended right kidney was removed from the body, failed to force the urine through the ureter, while, as soon as the coil was unfastened by the point of the scalpel, the urine gushed out freely. Such a condition might, perhaps, have been the result of inflammatory adhesions; but, if so, the coincidence of the two kidneys being so similarly, yet peculiarly, affected would be very remarkable. There is even evidence, I think, of the patient having had some renal *tumour* from the age of 12; for, if the remark made by her then medical attendant, that she had "a tumour on the spleen," be taken as worth anything, or indicative of her having any abdominal tumour whatever, I think it may fairly be admitted—knowing, as we do, her subsequent history—that the tumour was as likely to have then been renal as splenic. It would be difficult, without a more careful examination than seems to have been bestowed on the case, to discriminate between the two; and we are certain that she *had* long standing renal disease, while there is no proof that she really had a splenic affection.

Several cases of congenital hydronephrosis, dependent upon malformation of different parts of the urinary passages, have been recorded by Billard (c), Andral, Lee (d), Rayer, and others; in some the obstruction has been complete, in others partial only. In one of the cases recorded by Dr. Lee, the child was still-born, and the size of the right kidney was, from dilatation with fluid, larger than the head of the child. In cases where the obstruction is complete, the child must necessarily be still-born, or can at most live but a short time. When the obstruction is partial only, the individual may attain adult age. Rayer gives, in his work on Diseases of the Kidneys (vol. iii. p. 495), the details of a case of hydronephrosis, from malformation of the ureters, which terminated fatally at the age of 17. This case resembles the one which I have recorded, not only in its being one of double hydronephrosis, but in several other interesting particulars: among these points of similarity one of the most important is, the occurrence of hæmaturia. In Rayer's case it occurred for three days, about two years before the patient's death; in mine it occurred, as stated in the history, a month before the fatal termination; and an intelligent friend of the patient's, and one who lived much with her, informed me that once previously (ten years ago), she had also passed some urine "like coffee grounds." In neither Rayer's case nor my own was there any calculus, nor the history of any having been passed.

Fomentations, when the patient was suffering from her attacks, always gave her relief; and, in such cases, the hot bath is also of considerable use in promoting the flow of urine: Mustard poultices also relieved her a good deal of the aching pain she had in the lumbar regions. It is desirable in such cases to keep the bowels freely open, in order that their distension or fulness may not add to that occasioned by the condition of the kidney. Attention was paid likewise to the condition of the general health, and she appeared to improve for some time in that respect under these plans of treatment. I did not see her for about a year before her death, but it was by her request that I had the opportunity of making the examination of her body.

Death evidently resulted from the renal disease and uræmic poisoning, of which the drowsiness, wandering, slight con-

(c) *Traité des Maladies des Nouveau-nés.*

(d) *Medico-Chirurgical Transactions*, vol. xix. p. 238.

vulsive movements, frequent vomiting, etc., were characteristic symptoms. The disease had progressed to such an extent as to have caused nearly complete destruction of the secreting substance of the left kidney, which was thus rendered almost or altogether useless as regards the elimination of urine; the pelvis of the right kidney had become enormously distended with urine; and as, on this occasion, it failed to pass off by the ureter, suppression of the function of the kidney ensued, giving rise to the symptoms mentioned in the history of the case, and ultimately to its fatal termination.

ARTIFICIAL PREMATURE LABOUR INDUCED BY ERGOT OF RYE.

By HENRY RAYNES, M.R.C.S.

Mrs. C. B., of Gringley, the wife of a farmer, is the subject of the case under consideration, which I think of sufficient interest to admit of being placed upon record. It may be premised that on a former occasion, owing to distortion of the pelvis, immense difficulty was encountered in accomplishing delivery at the full time, in anticipation of which, in the choice of evils, I was induced to turn the child, and bring down the feet to supersede the necessity of cephalotomy. On a subsequent occasion, being the one in question, it was deemed advisable to induce premature labour, to obviate if possible the necessity of manual interference; with this view I purposed carrying out my intentions by bringing on labour, that the child might be born six weeks before the full time—about the 4th October, was the estimated period of completing delivery. On Friday the 1st I commenced with the ergot of rye, having emptied the bowels on the previous evening with the pulv. jalapæ co. ʒjss. The strength of the infusion was in the proportion of secale cornut. ʒii., aq. ferventis ʒvij., capt. ʒi. 2ada. qq. hor. The infusion was steadily persevered in until sixteen doses had been taken, afterwards it was discontinued *in toto*. Delivery was effected within fifty-eight hours of the exhibition of the first dose of ergot; between the second and third doses the uterus was roused into action, short pains continued every ten minutes through the remainder of the day, but nearly subsided towards evening, and the patient slept an hour or two during the night. At 3 a.m. the pains returned, and kept increasing all the day until evening, when a discontinuance of the medicine was recommended. The uterus was now fairly “under weigh,” and labour seemed to be thoroughly established. There was dilatation to a limited extent, and protrusion of the membranes at the os uteri. On Sunday morning pains were accumulating, and everything progressing as well as could be desired; and the labour was terminated at 9 p. m., October 3.

In conducting the treatment of this case, I ascribe the greatest potency to the ergot of rye in giving the first impulse to the propelling powers of the uterus. To those who would question the therapeutic action of the ergot of rye upon the uterus in the quiescent state, as far as I can judge upon the observation of an isolated case, I can assert that I have no doubt in the matter, for every dose seemed to tell; even when there was temporary mitigation of pain, there was a marked effect after each dose. The patient persevered with the ergot with the greatest punctuality lest the pains should remit. To use her own expression, “the medicine seemed to go to the part every time she took it.” The sponge tent, it must be admitted, was introduced on the second day, which was the only measure employed additional to the ergot; but, without reference to rupturing the membranes—a piece of malpractice to be industriously avoided—the membranes were allowed to remain entire within three hours of the time of delivery; they seemed to have accomplished all the dilatation they were capable of, therefore at that period I ruptured them; for unnecessary delay in this stage would retard delivery as much as premature interference in the first stage of labour. The pains from the first increased in force and frequency; but dilatation not being completed, and seeming stationary, the head remaining above the brim, mobile, admitting of being balanced on the tip of the finger, the membranes protruding in the form of a flaccid bag, and tough, without further delay, I ruptured them. From that moment a fresh impulse was given to the labour. Such was the promising state of things,

that it was conjectured that the labour would be terminated in half an hour; a rapid change, however, took place; the head in a few minutes filled the hollow of the sacrum, and it was expected that three pains would expel the head. It was not until nearly three hours after this that delivery was accomplished. The head made no advance beyond a given point; the pains abating, becoming both infrequent and ineffectual, and nature inadequate to overcome the resistance presented by the contracted outlet, I proceeded to deliver the woman with the short forceps, and extracted a living child, which survived thirty-six hours, and was in a fair way of being saved, but owing to inadvertence it died from inanition. The mother became convalescent, after having gone through a slight attack of milk fever, and having required the use of the catheter two or three times a-day for a week for retention of urine.

It is upwards of five years since the occurrence of this case. The woman is living, and can vouch for the correctness of the leading facts connected with her case.

Gringley.

CASE OF CONTUSED WOUND OF PENIS, AND LOSS OF BOTH TESTICLES,

TERMINATING FAVOURABLY.

By JAMES M. MADDEN, Esq.
Surgeon, Royal Navy, and District Surgeon.

On the 12th of November, I was called to see Robert Bradford, aged 50 years, a pauper, of Heavitree, St. Thomas's Union, who had met with a very serious accident, after which he walked to his cottage, more than a quarter of a mile, up a steep hill. While driving a waggon he fell under one of the horses, who trod on the scrotum, and inflicted a severe wound with the shoe. I found him in bed lying on his back, moaning in great pain, bordering on collapse. Countenance distressed and anxious; pulse feeble and weak, with a cold, clammy sweat. He was sensible, and stated how the accident happened. I turned over the sheet which covered him, and exposed a terrible wound, bleeding very much. There was extensive laceration of the penis, from the frenum down; both testicles pushed out, the left through the upper and the right the lower part of the scrotum; the testicles smashed and torn, but were not absolutely separated from the body; the spermatic cord greatly elongated, torn, hanging down over the anus, the right side of the scrotum, from the raphe, resting on the inner side of the thigh, torn in pieces; septum and cellular membrane removed, and, as the poor man said, “while I was in the stable I put my hand into my trousers and took out the torn-off part, and threw it away;” and which I have seen, and found it to be part of the left testicle and much of the cellular membrane. Secured the spermatic arteries, and removed the testicles; also secured another small artery, which bled freely. Brought together the torn pieces of the scrotum and penis with eight sutures; made clean the wound, and with common simple dressing (as for castration) applied the T bandage. He had a broken rib by the same accident, for which I put on a fracture-belt. He expressed himself comfortable after dressing, and I promised to see him again about bed-time. He refused to be sent to the Devon and Exeter Hospital. At 9 p.m. found him wonderfully well, everything considered. Some bleeding from the wound, but not sufficient to remove the dressing; made more pressure.

November 13th.—Passed a quiet night, and appeared free from pain; made water freely; no bleeding.

14th.—He appears doing well.

15th.—Removed the dressing, having directed a poultice of bread and water to be applied over the wound, a few hours before my visit; the appearance of the wound favourable, and all the functions of life maintained with perfect integrity; slight cough, with expectoration slightly coloured with blood, from the injury of the rib; bread and water poultice *ter die*, with cough mixture and spare diet.

20th.—Made the following report to the Board of Guardians:—Robert Bradford, who had met with a severe accident, as reported, is doing well, but his recovery will occupy some weeks.

December 4, 1856.—Made the following report:—Robert

Bradford is going on well, the sloughs off the wound looking healthy, and healing fast; continues without a single constitutional or bad symptom; cough nearly gone, and no uncasiness from the fractured rib.

31st.—Reported the case as terminating favourably, but recommending parish relief for another month; and up to this time he is receiving parish pay, and during his illness the guardians were liberal to him.

The laceration of the penis healed entirely by first intention, and not at all disfigured, and of its natural appearance; not so the parts of the scrotum, for sloughing followed, not to any extent to interfere with the adjustment of the parts. The upper part of the scrotum is a consolidated, hard mass; a small portion of the bottom is elastic and soft.

Heavitree, Exeter.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. MARK'S AND OTHER HOSPITALS.

CLINICAL COMMENTARIES ON DISEASES OF THE RECTUM.

No. IV.—PREVENTION OF HÆMORRHAGE AFTER OPERATIONS ON THE RECTUM.

ONE of the features which must strike a looker-on at St. Mark's is the very great freedom with which the knife is employed. In the operations for fistula and for fissure Mr. Salmon makes very free and deep incisions; and, indeed, his rule in the former, of cutting the base of the sinus as well as the sphincter, necessarily involves an extent of incision at least three times that usually employed. We adverted last week to his opinion that the use of chloroform much increased the liability to hæmorrhage, and we may now mention other precautions adopted in his practice. The first is the use of cotton-wool instead of lint, as a dressing. Immediately after the incisions are completed, a large plug, of the finest jeweller's wool, is introduced into the gut, and pressed gently into the whole length of the wound. There is some art in accomplishing this neatly and efficiently. A metal probe, the thickness of a quill, should be used, and the fore-finger of the left hand having first been passed into the bowel, the latter is held well open, away from the wound; the tuft of wool is then pushed high up into the gut, and lastly pressed down on the line of incision. The wool must on no account be oiled, otherwise its object, as a restrainer of hæmorrhage, will be defeated, since it is by its loose and absorbent texture that it forms so excellent a plug. Its softness prevents its becoming a source of irritation to the rectum, as a fold of lint of any size generally does. Each patient on being sent back to bed has a separate attendant allotted to him, whose duty it is to sit by him with a piece of sponge gently pressed against the anus, and to report any bleeding should it occur. No styptics are ever used; and we are informed that the actual cautery, which is deemed the one resource, has been employed at the Hospital but twice during the last two years. Continued pressure is the means which is almost invariably found efficient. Whilst on the subject of hæmorrhage, we must note that Mr. Salmon never excises internal piles, a practice which, on account of the danger of uncontrollable bleeding, is, we believe, now reprobated by all Surgeons.

No. V.—EPITHELIAL CANCER AT THE VERGE OF THE ANUS SUCCESSFULLY REMOVED.

Mr. Curling has now under his care in the London Hospital a woman, from whose anus, nearly two years ago, he excised a growth of epithelial cancer. After the operation some warts grew, which were partly destroyed by the chloride and zinc, and partly removed by scissors. She got quite well and suffered no inconvenience, although in the excision a portion of the sphincter had been removed. At length, however, the disease recurred, and about a month ago Mr. Curling again excised it. The part is again healed. On each occasion the opinion as to its cancerous nature was confirmed by microscopic examination. Mr. Curling mentioned to his class that this was the third example of this rare affection which he had recently seen. One of the others was in an elderly gentleman, and was so extensive that no operation was advisable; the

other in a German lady, who had been operated on by a Vienna surgeon six months before, and for whom Mr. Curling performed a second excision, with the result that now, at the expiration of two years, the part was quite sound. Considering the frequent occurrence of epithelial cancer at other outlets, on the lips, the labia pudendi, etc., its rarity at the anus is somewhat remarkable. Cancer of the rectum is, of course, a tolerably common disease, but it is usually of the scirrhus form, and must be considered of quite distinctly from these instances of cancer of the skin around the anus. Concerning the latter Mr. Syme writes:—"It is possible that cancer may occur at the verge of the anus," etc. . . . "But cases of this kind are extremely rare," etc. (a)

No. VI.—MELANOTIC CANCER AT THE VERGE OF THE ANUS SUCCESSFULLY REMOVED.

No writer, as far as we are aware, has described an example of melanosis of the anus in the human subject. In the horse that part is a favourite seat for that form of cancer, the liability no doubt depending upon the patches of black pigment which in horses of all varieties of colour are there found. Melanosis in the horse is however a very different disease constitutionally from what it is in man, and generally manifests much less of the malignant character. None of the works before us so much as mention the disease. The following example of it is now under Mr. Moore's care in the Middlesex Hospital. Thomas Marrison, aged 66, is now a most unhealthy-looking man, his cachexia being a very type of that known as the "malignant." He first came under Mr. Moore's care in May 1855, having then for more than two years suffered from disease of the anus. He had been at several Hospitals, and amongst others for nine months at the Cancer Hospital. His disease was a fungating growth of melanosis, which was closely united with the right side of the sphincter. It was ulcerated and frequently bled freely. He was much reduced in health, and had not worked for nearly a year. Looking upon the hopeless condition of the disease if let alone, and having ascertained that it did not extend far into the bowel, Mr. Moore proposed to him to excise it, and to this he most gladly acceded. The operation was performed on May 11, and involved the removal of a large portion of the external sphincter in about three-fifths of its whole circumference. The hæmorrhage was restrained by the usual means, and the man did uninterruptedly well. The part healed soundly, and perfect control over the bowel remained. For a whole year following the man, to use his own expression, probably a little exaggerated, was as "well as ever he was in his life." He followed his occupation regularly, and had no inconvenience whatever with his motions. About Midsummer 1856, however, he began again to suffer from sensation of heat and bearing down about the part, and these having slowly increased, he was re-admitted in December last. The rectum is now affected higher up, but there is no external disease, his cachexia, as already stated, is marked, and his health is fast giving way. His case is now plainly beyond hope of benefit from surgery, and in all probability he already has secondary growths. It should have been stated that the man is not aware of any of his relations having ever had cancer.

The benefit obtained, both in this case and those of Mr. Curling's above mentioned by free excision of the diseased growth and the absence of any inconvenience from the removal of parts of the sphincter, are circumstances which strongly point to the adoption of a like practice in similar cases. In Mr. Moore's case it was greatly to be regretted that the measure had been so long neglected, since, had it been earlier performed the operation would have been a comparatively trivial one, and would probably have been attended by more lasting advantage.

No. VII.—THE DISTINCTION BETWEEN EXTERNAL AND INTERNAL PILES.

It is a very common mistake with students to confound external with extruded piles, and to call those internal which are out of sight, and those external which are visible. We

(a) Cruveilhier and Velpeau both held opinions very different from these, and considered cancer of the anus more common than cancer of the rectum. Velpeau, indeed, spoke of the disease as far from infrequent. There is but little doubt but that both had formed their conclusion from general impressions, and those derived from very imperfect data, since, as Dr. Walshe points out, the Paris Registers assign but 13 deaths to cancer of the anus, and 221 to that of the rectum.

need not say that this is an utterly false nomenclature. External piles are those which form without (external to) the circumferential margin of the sphincter, and are consequently always covered with skin; internal ones are those which are within the sphincter, (not above it,) and are covered by mucous membrane. External piles consequently are always dry and cuticular, internal ones moist and slimy. The external have a light uniform bluish tinge, varying according to the density of the skin over them; internal ones are bright and florid, or from all the shades of florid to those of livid and purple, according to the intensity of their congestion. External piles almost never bleed; internal ones almost always do so. External piles are dilated hæmorrhoidal veins; internal ones, as we shall presently see, are of a very different nature. External piles may be cut away with impunity, while to tie them would risk phlebitis and purulent absorption. Internal piles may be tied with safety, while to excise them is to risk fearful, and it may be fatal, hæmorrhage. It is most important to understand clearly that the difference is one of kind and not of mere position.

HOSPITAL NOTES.

EXTRACTION OF CATARACT THROUGH A CLOSED PUPIL.

THE practicability of performing extraction of the lens in cases in which the pupil is closed by adhesions to the capsule which has recently been demonstrated by Mr. Critchett at Moorfields, is one of the most valuable of the advances lately made in ophthalmic surgery. It enables relief to be afforded to a large class of cases heretofore deemed all but hopeless. The operation has now been performed by Mr. Critchett and his colleagues repeatedly, and is in some respects and in certain cases even more easy than extraction in a healthy eye. The iris being fixed, there is no danger of wounding it from its getting over the edge of the knife, nor is there much risk of escape of the vitreous or of prolapse of the iris into the section. The principle is so simple that, like many other invaluable discoveries, one wonders it had never suggested itself before. In cases of adherent pupil the adhesions are to the capsule, and not to the lens itself; and the former having been well lacerated, the latter is found to be as loose as in a healthy eye. A second needle operation for getting rid of the capsule after the section has well healed, is of course generally necessary, as indeed is very often the case after ordinary extractions. In some cases of closed pupil it must be admitted the operation is of great difficulty; when, for instance, the whole margin of the pupil is firmly united, and too rigid to allow of the escape of the lens through it. In several such we have recently seen both Mr. Critchett and Mr. Bowman display admirable operative skill in the use of scissors, &c., to liberate and enlarge the rigid pupillary margin. One case, still occasionally seen on Mr. Critchett's days, is of a peculiarly satisfactory nature, inasmuch as it had been given up as hopeless by a very excellent surgeon in another Hospital after trial of the ordinary methods. The poor woman had but one eye, and in it a dense yellow cataract existed, with closed pupil. Patient attempts at drilling were made, but with the result of so much irritation and such slow progress, that the surgeon, after repeated operations, gave up the treatment. Mr. Critchett extracted a dense amber-coloured lens, with the effect of restoring sight with which she can read fairly, and see distant objects well. The lens proved to be so dense in its centre, that the failure of the drilling was well explained.

TRAUMATIC CATARACT OF FORTY YEARS' STANDING—AMAUROSIS IN THE OTHER EYE—EXTRACTION AND RESTORATION OF SIGHT.

A man, aged 49, was admitted under Mr. Bowman's care all but blind. His left eye had, during the last year, become amaurotic and sightless, and his right was the seat of a dense white traumatic cataract, the result of a stab with the prong of a fork forty years ago. He could but just discern light from darkness. After examination with the ophthalmoscope it was evident that nothing could be done by treatment for the amaurotic eye. The man stated that since the accident to the right he had, until the last year, enjoyed perfect vision with the left. Mr. Bowman determined to perform extraction in the left. This was done by a modified operation through a small

opening in the cornea. With glasses, the man can now see well, and can read the smallest type. The case is of interest in showing for how long a period the retina in the cataractous eye will retain its functional integrity.

CUTANEOUS ERUPTIONS A PROTECTION FROM BRONCHIAL INFLAMMATIONS.

It is often remarked at the Hospital for Skin Diseases that coughs and bronchitic attacks are very unfrequent among the patients. This was especially commented upon during the cold weather a few weeks ago, when a large part of the population suffered from one or other form of catarrhal, bronchial, or pharyngeal affection. Those who have cutaneous eruptions generally suffer from aggravations of them at changes of weather, during severe cold, and in the prevalence of east winds, &c., and thus the cause which in another would originate a bronchial affection, may perhaps expend itself on the part already predisposed to irritation by existing disease.

HYSTERIC TYMPANITIS.

At the St. George's and St. James's Dispensary, Dr. Priestley has lately had under his care two cases of hysteric tympanitis, the affection being apparently similar in nature to that morbid condition which has been described as spurious pregnancy. In one of these cases, an unmarried woman aged 35 years, the abdomen assumed exactly the form it presents when occupied by a large ovarian or other tumour. So great was the resemblance, in fact, to an abdominal tumour, that it has been considered and treated as one by two or three Practitioners, and the abdomen and loins are literally covered with the marks of leeches and cupping glasses employed in the hope of mitigating the inflammatory attacks to which it was apparently liable. When examined lately, the abdomen was large, as in the seventh month of pregnancy, and little modification was observed when the patient assumed the horizontal position, except that the recti muscles became tense, and divided the tumefaction into two lateral halves. If care was taken to empty the bowels previous to examination, the abdomen was everywhere tympanitic on percussion, but so rounded and resistant as to give the impression of an elastic tumour. By putting the patient deeply under the influence of chloroform, as recommended by Dr. Simpson, the swelling entirely disappeared, leaving the abdomen perfectly flaccid, and allowing the hand to be pressed to the spine; the appearance of a tumour slowly returned as the anæsthetic condition gradually disappeared. In a second case, a girl of 17, with a less marked degree of abdominal tension, there was swelling of the breasts, darkened areolæ, and enlarged follicles, which at first led to the suspicion of pregnancy. The uterus was not, however, enlarged; but her mother gave the information that she was in the habit of masturbating. In both these cases there was extremely scanty menstruation, in the first one constant recurring acne of the face, while in both distinct globus and other hysterical symptoms were present. No spinal tenderness nor appreciable uterine disease existed in either case. Dr. Priestley expressed the opinion that, in these cases, the swelling was produced by the reflex action of some uterine or ovarian irritation acting on the muscles of respiration, but more especially on the diaphragm. He had noticed that, in these and other cases, the chest seems contracted in its dimensions, the expansion being very imperfect during inspiration. When the patient is under chloroform, the base of the chest expands as the abdominal tension disappears. The first of the patients mentioned had constant pain under the short ribs, corresponding with the attachments of the diaphragm; and Dr. Priestley considered it probable that the pain so often experienced in this situation by those suffering from uterine affections was referable to a similar spasmodic action of the diaphragm. It seems certain that the bowels are not distended with flatus in this form of tympanitis, as none escapes when the swelling disappears. The employment of chloroform in these cases he considered of great value, not only showing certainly that no solid tumour exists, but serving as a guide to the true pathology of the affection. Dr. Priestley added, that he has several times met with circumscribed "phantom tumours," similar to those described in the Hospital Reports of this Journal. In these the muscular contraction was supposed to be of a partial kind. More than one of Dr. Priestley's cases, however, he is convinced, actually consisted of the kidney in a mobile condition, such as those described by M. Rayer, and which readily slips from the fingers during a tactile examination. At a post-

mortem examination of one of these cases, where the tumour had been correctly diagnosed during life by Dr. Simpson, the peritoneum was found reflected over the posterior surface of the kidney, giving it thus a mesentery, and allowing it very considerable motion in the right side of the abdomen.

TREATMENT OF FAVUS.

Whilst recording the varieties of practice adopted at our London Hospitals, we would call attention to the means employed by Dr. Fuller at St. George's Hospital, for the cure of scald-head. It is extremely simple, and in Dr. Fuller's opinion, exceeds in efficacy any of the expedients ordinarily resorted to for the cure of this troublesome disease. It consists in the thorough ablution of the head twice a-day, by means of soft soap, and the subsequent inunction of an application, composed of equal parts of the unguentum hydrargyri ammonio chloridi, and the unguentum picis liquidæ. The treatment is preceded by a large bread poultice over the entire scalp, to facilitate the removal of the adherent yellow scabs. This is rarely repeated—soft soap is then rubbed in dry, and is as often washed off. After the head has been thus cleansed and dried, the ointment is rubbed in for the space of five minutes, and is then smeared over the head, where it is allowed to remain until the evening, when the same process is had recourse to. When this treatment is adopted early, Dr. Fuller states that a cure is usually effected in the course of a fortnight or three weeks—sometimes within a shorter period—and even in old-standing obstinate cases, is rarely delayed beyond a month or five weeks. Further, he states that unless the hair be very thick, it is not necessary to cut it off, though of course such a proceeding facilitates the carrying out of the measures on which the cure depends. We may refer to two patients recently under his care at the Hospital in exemplification of its speedy action. The one, a child, aged four years, had been suffering eight days before the treatment was commenced, and all the symptoms had disappeared by the expiration of a fortnight: the other, a child, seven years of age, had been affected above three weeks, and was cured within a month after the first application of the remedies. In the first instance the hair was not cut off, and the mother declared that the ablution and inunction at once "killed the disease" whenever it made its appearance—an assertion borne out by the speedy cessation of the symptoms: in the other, the hair was taken off by the scissors, and the usual course pursued. In common with other practitioners, Dr. Fuller administers tonics and ferruginous medicines internally, under the belief that the Achorion Schönleini, with which the disease is intimately connected, finds its most congenial nidus in children who are languid and out of health; but he trusts entirely to the local measures for effecting a cure of the local disease.

EXPECTED OPERATIONS.

On Saturday (this day), at St. Bartholomew's, Mr. Skey has a case of lithotomy. At St. Thomas's, Mr. Le Gros Clark has a lithotomy case; and Mr. Simon one of extirpation of the eye-ball. At King's College, Mr. Fergusson will perform lithotomy and an amputation of the leg, and also operate for hare-lip and necrosis of the lower jaw. Mr. Bowman, at the same Hospital, has one or two operations on the eye. At the Metropolitan Free, on Monday, Mr. Borlere Childs has a case of cancer of the face; and Mr. Hutchinson one of necrosis of almost the whole shaft of the femur, both of which are to be submitted to operation.

THE PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

STATISTICAL REPORT OF THE PRINCIPAL OPERATIONS PERFORMED DURING THE LAST SIX MONTHS OF 1856.

(Continued from page 240.)

THE subjoined Report comprises the following Hospitals:—Addenbrooke's (Cambridge), the Birmingham (Queen's), the Berks Royal (Reading), the Cheltenham General, the Cumberland (Carlisle), the Derby General, the Dorset County (Dorchester), the Dundee Royal Infirmary, the Durham County, the Gloucester, the Hitchin General, the Hull, the Leeds, the Leicester General, the Liverpool Royal, the Liverpool Southern and Toxteth, the Margate Sea-bathing

Infirmary, the Nottingham General, the Sheffield General, the North Staffordshire (Etruria), the South Staffordshire (Wolverhampton), the Staffordshire General (Stafford), the Sussex County (Brighton), the West Norfolk and Lynn (Lynn), and the York County Hospital.

AMPUTATIONS.

Of the Foot.—Case 94.—The York: Mr. Hey.—An intemperate man, aged 45. Primary amputation through the metatarsal bones on account of crushed toes, etc. Delirium tremens. Recovery. The stump had retracted somewhat. Case 95.—York: Mr. Hey.—A man, aged 21. Primary Chopart's amputation on account of gun-shot wound of the foot. Recovered, with a very good stump. The tendo-Achillis was not divided, and no trouble from retraction ensued. Case 96.—The Durham: Mr. Stoker.—A mason, aged 42, in good health, had the front of his foot crushed by a large stone falling on it. A primary Chopart's amputation was performed. Recovery, with a good stump. Case 97.—The Nottingham: Mr. Thomas Wright.—A man of middle age, admitted on account of crushed foot. Primary amputation at the ankle-joint. Part of the flap, which had been much contused, sloughed. Recovery. Case 98.—The North Staffordshire: Mr. Turner, a man aged 24, in good health. A primary Chopart's amputation was performed on account of crushed foot. Recovery. Case 99.—The Dundee: Dr. Crockatt.—A man aged 20, in good health, for nine years the subject of diseased tarsus. Amputation at the ankle-joint. Recovery. Case 100.—The Bradford: Mr. Terry.—A man, aged 24, of strumous diathesis; for eighteen months the subject of scrofulous disease of the tarsus. Chopart's amputation, the tendo-Achillis being divided at the same time. Recovery, with a good stump. Case 101.—The Liverpool Royal: Mr. E. Bickersteth.—A healthy man, aged 44, was admitted some weeks after having received a fracture of his right os calcis. Sloughing on the outer side of the ankle had ensued. Amputation at the ankle-joint in the ordinary method was advised, but he refused to consent. A few days later, however, he came willing to have the foot removed, but sloughing had so extended that the flap could now only be cut from the inner side. The stump healed well, and was an excellent one. Case 102.—The Derby: Mr. Fearn.—A woman, aged 26, in good health. Chopart's amputation on account of fungus hæmatodes of the foot. Rigors on the fourth day; inflammation of the absorbents followed, and the flap sloughed. Death on the tenth day. At the autopsy pus was found in the femoral vein, there were old pleuritic adhesions, and pneumonic consolidation. Some deposits of tubercle in the lungs were in a state of suppuration.

Of the Upper Extremity.—Case 103.—The West Norfolk and Lynn: Mr. Kendal.—A woman, aged 68. Amputation through the forearm on account of chronic disease of the carpus and wrist. Recovery. Case 104.—The North Staffordshire: Mr. Garner.—A healthy man, aged 53. Amputation through the upper arm on account of diseased elbow-joint. Recovery. Case 105.—The North Staffordshire: Mr. Turner.—An unhealthy man, aged 27. Amputation through the upper arm on account of diseased elbow-joint. Recovery. Case 106.—The North Staffordshire: Mr. Ball.—A healthy lad, aged 18. Amputation through the upper arm on account of diseased elbow-joint, the result of injury. Recovery. Case 107.—The Bradford: Mr. Meade.—A very feeble woman, aged 43. Amputation through the forearm on account of chronic disease of the elbow-joint. Recovery. Case 108.—The Bradford: Mr. Terry.—A woman, aged 20, in delicate health. Amputation through the forearm on account of disease of the wrist-joint. Recovery. Case 109.—The Bradford: Mr. Meade.—A healthy boy, aged 17. Primary amputation at the shoulder-joint on account of crushed limb. As no flap could be formed, the end of the acromion was also removed. Recovery. Case 110.—The Queen's Hospital, Birmingham: Mr. Knowles.—A labourer, aged 51. Primary amputation through the forearm on account of crushed hand. He had lost much blood, and was extremely reduced. The operation was performed by Mr. West, the House-Surgeon, immediately on his admission. Recovery. Case 111.—Addenbrooke's (Cambridge).—A healthy man, aged 44. Amputation just above the wrist, on account of contraction following thæcal abscess. The abscess had followed a prick of the thumb six months previously, and had disorganised the wrist-joint and carpus. Recovery. Case 112.—Addenbrooke's

(Cambridge): Mr. Hammond.—A healthy lad, aged 13. Primary amputation just below the shoulder-joint on account of crushed arm. Recovery. *Case 113.*—The York: Mr. Husband.—A man, aged 35, in good health. Primary amputation through the forearm on account of crushed hand. Recovery. *Case 114.*—The York: Mr. Husband.—A strumous lad, aged 16. Amputation at the shoulder-joint on account of disease of the whole shaft of the humerus. The lad was phthisical, and has also disease of the tarsal bones. Recovery, as far as the amputation was concerned. *Case 115.*—The Sussex County: Mr. Lowdell.—A man, aged 36. Amputation through the upper arm on account of disorganisation from sloughing of the skin, etc. in an attack of cellular inflammation previous to admission. He was fast sinking when the operation was performed. Recovery. *Case 116.*—The North Staffordshire: Mr. Ball.—A healthy man, aged 37. Amputation through the upper arm on account of severe compound fracture. Recovery. *Case 117.*—The Leeds: Mr. Smith.—A healthy man, aged 23. Admitted on account of a severe gunshot wound of the elbow, a fortnight previously. Amputation through the upper arm on account of gangrene. Tetanus occurred on the fourth day, and lasted five weeks, during the whole of which time the stump did remarkably well. Subsequently a large abscess formed in the calf, and he had also a severe attack of diarrhoea, but eventually recovered. *Case 118.*—The Leeds: Mr. Teale.—A healthy man, aged 38. Primary amputation through the forearm on account of crushed wrist. Recovery. *Case 119.*—The Leeds: Mr. Teale.—A healthy man, aged 70. Primary amputation through the upper arm on account of crushed elbow-joint. Recovery. *Case 120.*—The Hull: Dr. Lunn.—A healthy man, aged 35. Primary amputation through the upper arm on account of crushed elbow. Recovery. *Case 121.*—The Gloucester: Mr. Wilton.—A labourer, aged 28. Primary amputation near the shoulder-joint on account of crushed arm. Secondary hæmorrhage on the 23rd day. The recovery was retarded by an attack of pneumonia, with circumscribed empyema, but it was ultimately perfect. *Case 122.*—The Staffordshire: Mr. M'Munn.—A healthy lad, aged 12. Amputation through the upper arm on account of crushed elbow-joint. Recovery. *Case 123.*—The South Staffordshire: Mr. Coleman.—A healthy Irishwoman, aged 37. Amputation through the forearm on account of epithelial cancer at the back of the hand. Recovery. The middle finger had been amputated some time previously, on account of the same disease. *Case 124.*—The York: Mr. Husband.—A delicate lad, aged 21. Primary amputation through the forearm, on account of gun-shot injury. Recovery. *Case 125.*—The Durham: Mr. Shaw.—A healthy mason, aged 28. Primary amputation through the upper arm, on account of crushed elbow. Recovery. *Case 126.*—The Nottingham: Mr. Wright.—A boy, aged 10. Primary amputation through the upper arm on account of compound fracture. The boy suffered also from concussion of the brain, but he made a good recovery. *Case 127.*—The Nottingham: Mr. Booth Eddison.—A labourer, aged 61. Primary amputation near the shoulder-joint. Recovery. *Case 128.*—The Nottingham: Mr. Thomas Wright.—A healthy lad, aged 18. Primary amputation through the metacarpal bones, on account of crushed hand. Recovery. *Case 129.*—The Nottingham: Mr. Wright.—A labourer, aged 22. Primary amputation through the forearm, on account of gunshot injury. Recovery. *Case 130.*—The Nottingham: Mr. Booth Eddison.—A healthy boy, aged 10. Amputation through the forearm, on account of the ulceration left by a severe burn. Recovery. *Case 131.*—The Nottingham: Mr. Booth Eddison.—A healthy boy, aged 12. Primary amputation near the shoulder-joint, on account of the arm having been torn off by machinery. The right femur and two ribs were also fractured. Recovery. *Case 132.*—The Liverpool Royal: Mr. Bickersteth.—A healthy man, aged 50. Primary amputation through the upper arm, on account of crushed arm. Recovery. *Case 133.*—The Dundee: Dr. Crockatt.—A man, aged 53. Admitted on account of compound fracture of the ulnar and radius, the elbow-joint being laid open and dislocated. An attempt was made to save the arm, but profuse suppuration following, it became necessary to amputate a month after the accident. Recovery. *Case 134.*—The Leeds: Mr. Smith.—A healthy man, aged 24. Admitted on account of a severe compound fracture of the forearm. Gangrene followed, and secondary amputation through the forearm was performed a week after the accident. He gradually sank, and died twelve

days after the amputation. *Case 135.*—The Derby: Mr. Fearn.—A healthy labourer, aged 30. Primary amputation at the shoulder-joint, on account of the arm having been torn off by a thrashing machine. Profuse hæmorrhage on the tenth day from the axillary artery. Death. *Case 136.*—The Leicester: Mr. Benfield.—A healthy labourer, aged 45. Primary amputation, on account of compound comminuted fracture of the forearm. Abscess occurred over the outer condyle, which had to be opened. Death fourteen days after the operation. At the autopsy pus was found in one of the brachial venæ comites, and there was great congestion of the lungs. *Case 137.*—The Bradford: Mr. Parkinson.—A lad, aged 19. Primary amputation at the shoulder-joint, on account of crushed arm. He had sustained also a severe concussion of the brain. Death thirty-six hours after the operation, no reaction having taken place. *Case 138.*—The Queen's Hospital, Birmingham: Mr. Sands Cox.—A feeble man, aged 62, received a wound just about the left wrist, from a piece of glass. Great hæmorrhage took place, but it was arrested by a graduated compress. He insisted upon returning to his work, and a few days afterwards presented himself with an abscess among the tendons of the forearm. Frequent attacks of secondary hæmorrhage now took place, he became exceedingly exhausted, and amputation had to be performed seven weeks after the accident. Death, with typhoid symptoms, followed on the eighth day. At the autopsy the kidneys were found granular, and there was a pint of pus in the left pleural sac. *Case 139.*—The Leeds: Mr. Hey.—A feeble man, aged 31, who was sinking from profuse discharge from a disorganised elbow-joint. The disease had existed a year. Amputation. Death a fortnight afterwards. Tubercles were found in the apices of both lungs.

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Medical Times & Gazette.

SATURDAY, MARCH 14.

MEDICAL REPRESENTATIVES IN PARLIAMENT.

WITHOUT recurring to the lamentable deficiency of information which has prevailed upon Medical topics in successive Parliaments, and the consequent injustice of which the members of our Profession have been the victims, we may at once turn away our thoughts from the unsatisfactory contemplation of the past, and look forward to the coming dissolution as a probable source from which we may derive assistance in the prosecution of our claims. We come daily and hourly into intercourse with all classes of the people, who are soon to be called upon to exercise their rights in the choice of representatives; and it is by an urgent appeal to the electoral body that we may expect hereafter to obtain such a hearing in the House of Commons as is accorded to the Army, the Navy, the Law, or the Church—professions which are vigorously upheld by competent representatives in one or the other House of Parliament. Hitherto, with the single exception of Mr. Brady, we have not only been unrepresented, but we have been misrepresented; and it is perfectly monstrous to find that when Medical questions are entertained at all in our Legisla-

ture, the opinions of quacks, or the supporters of quacks, are received with far greater respect than those of the legitimate and learned professors of our art. Yet we are willing to believe that if there existed in the Legislature a proportion, however small, of MEDICAL REPRESENTATIVES, such a state of things as now unfortunately prevails would cease to exist. Questions relating to the Public Health; to the rise, and progress, and prevention of epidemics; to the adulteration of food and drugs; to vaccination; to the sale of poisons, are now discussed by persons in our two Houses of Parliament who, whatever may be their general abilities, are wholly unacquainted with medicine, and the consequence is, either that useful legislation on these subjects is neglected altogether, or that mischievous measures are passed in spite of the remonstrances of the Profession. Again, in all the departments connected in any manner with the Practitioners of medicine—as the Lunacy Commission, the Poor-law Board, and the Board of Health—not only are the Parliamentary representatives of those bodies wholly ignorant of Medical affairs, and consequently useless to the public and indifferent to the interests of Medical men, but they are themselves liable to continual removal from their respective offices, in consequence either of ministerial changes, of Court favour, or of their own caprice. Thus we have seen the Presidency of the Board of Health occupied successively by three gentlemen, no one of whom was peculiarly eligible for the office, and two of whom did not retain their positions long enough to acquire a competent knowledge of their duties; indeed it would appear that the Presidency of the Board of Health is a mere stepping-stone to a more agreeable appointment, or a kind of hotbed for the reward of political service, or the development of aristocratic placemen. No sooner is the favoured individual comfortably seated at the head of the Board, and begins to be initiated into the mysteries of choleraic and typhus epidemics, of the protective power of vaccination, of the principles of ventilation and drainage, and other matters of the same kind, than he is hurried away to take the charge of some other department, in which the official income is never smaller, and where the duties of the post are, perhaps, more easily learned.

Suppose a question to be asked in the Legislature upon any matter relating to the Church, it is answered by a bishop in the House of Lords, and he is listened to with deference and respect; suppose a legal question to be put, and the Lord Chancellor in one House, or the Attorney-General in the other, delivers his oracular response, while the other 160 legal members are far from silent: but if a Medical question arise, it is either received with contemptuous silence or derisive laughter, or the patrons of Homœopaths, Coffinites, Mesmerists, and Hydropathists, arrogate to themselves the right of speaking as the exponents of Medical science! Nay more, the envenomed arrow is too often hurled at the Profession of medicine by one of her own degenerate sons, as we have lately had the painful duty to record, and an additional stigma is thus cast upon the whole of our body.

The remedy for this unfortunate state of affairs is not difficult to discover; and we hope that the coming dissolution of Parliament will enable us to obtain greater influence than we have yet exercised in the House of Commons. Not only should the members of our Profession be on the alert at the ensuing elections, and extract from the respective candidates a pledge to listen to the numerous grievances under which our Profession at present labours; but MEDICAL REPRESENTATIVES should be sent into Parliament expressly to preserve the health of the State, and to uphold the rights of their order. Like the representatives of the Law, the Church, the Army and Navy, the commercial and landed interests, and the

English Universities, there ought to be representatives of the Medical Profession, men of candour, probity, science, and independence, who may be safely entrusted by the mass of their Professional brethren to represent them in the assembled councils of the nation. We do not require defenders or advocates of a bad cause; we seek not after selfish ends, or the gratification of individual ambition; we ask not to be shielded from censure, if we have committed any act which is worthy of blame; but, in the name of universal justice, and in the common interests of humanity, we ask that a noble and beneficent art should be dissociated from quackery, and that its professors should be protected in the legitimate exercise of their duties. Compared with the education for the Bar, the Church, the military service, or the commercial world, that for the Medical Profession is infinitely superior, by the breadth of its grasp and the loftiness of its aspirations; while, in relation to its value to human society, we say advisedly that it is, at least, inferior to none. Honours and emoluments are heaped upon the skilful advocate, the fortunate divine, the successful merchant, the hardy warrior—nor do we envy the distribution of rewards to those to whom they are justly due—but, in the name of thousands of our brethren, we ask for a fair representation of our Profession. Let, therefore, those who have interest with electoral constituencies exert it in time.

THE WEEK.

A deputation from the Apothecaries' Hall of Dublin had an interview on Saturday last with the Right Hon. W. Monsell, M.P., at the office of the Board of Health, on the subject of the recently proposed measure of Medical Reform. Having heard the views of the deputation, the right honourable gentleman entered at considerable length into the several details of the subject in question, eulogized the Medical Institutions of Ireland, and expressed his opinion that the Apothecaries' Hall should take a part in the government and education of the Profession. On Monday the deputation waited by appointment on Mr. Headlam, M.P., and called his attention to the manner in which the late conferences had been held to the exclusion of their body and without seeking their concurrence, while an attempt was made to deprive them of their rights and privileges. The deputation explained the nature of the arrangement which had been entered into and agreed upon by the several Colleges and Halls at the conference held at the College of Physicians in London in the year 1848, which was subsequently published in the Third Report from the Select Committee on Medical Registration and Medical Law Amendment, ordered by the House of Commons to be printed August 25th, 1848, at which conference the right of the Apothecaries' Hall to due representation was fully admitted. Mr. Headlam stated that the bill he had obtained leave to bring in would not be further proceeded with during the present Session, and that it would not be printed; but that it was his intention, if returned in the next Parliament, to re-introduce it at a very early period, modifying it to meet the views of the deputation, by giving to the Hall the representation sought for upon the Council and Board, the Hall waiving in favour of the new general Practitioner the exclusive privilege they at present possess, but retaining, with respect to non-registered persons, the salutary control which their act gives them over the practice of Pharmacy.

At the recent assizes held in the town of Drogheda, Rose M'Bride, a cripple, was indicted for having, on the 12th of January, administered to Anne Freeman two drachms of tartar emetic with intent to cause her death. It appeared on the trial that the prisoner resided with Anne Freeman, and was in the habit of preparing her food; that in consequence

of repeated attacks of purging and vomiting, the latter went into the hospital of the poorhouse; that during her stay in the hospital she had partaken on one occasion of wine, on another of a cake, sent to her by the prisoner; that in ten or fifteen minutes after taking these things she had attacks similar to those she suffered from before she came into the house, and that other persons who had eaten of the cake had been similarly affected. A pint of the vomited matter was sent to Dr. Geoghegan, Professor of Medical Jurisprudence to the College of Surgeons, who recovered from them a quantity of antimony corresponding to nine grains and seven-tenths of tartar emetic. It further appeared that the prisoner had repeatedly, on various pretexts, sent different individuals to purchase small quantities of tartar emetic. On the second day of the trial it was intimated that one of the jury was dangerously ill. Dr. Pentland testified that the sick juror's pulse was then at 140, and that had he been previously consulted as to the state of his health he would have returned him as unfit to serve on juries in consequence of his being affected with asthma. The jury was then discharged, and the cripple was conveyed to the Drogheda gaol amid the hooting of the crowd assembled outside the court. Eleven of the jury were for a conviction.

At the Cavan Assizes Dr. William Wright, a very old man, and nearly blind, pleaded guilty of the manslaughter of an inmate of the Union workhouse. He had been acting for Dr. Taylor, the Medical attendant of the Bailieborough Poorhouse, and by mistake gave strychnia for calomel. The label at the side of the bottle at which he looked was nearly defaced, though there was a distinct one at the other side. Testimony was given that the state of the prisoner's health was such that he could not endure confinement. He had previously held two dispensaries in the county. The judge observed that those who allowed this old man to practise were greatly to blame, and sentenced him to be confined for one month.

The Universities of Edinburgh, Glasgow, and Marischal College at Aberdeen, have just issued a statement relative to degrees in Medicine, objecting to the New Medical Reform Bill, and endeavouring to bring about some agreement "by which the Medical degrees granted in Scotland, the education for them, and the necessary examinations, might be so assimilated in all the Scotch Universities, and so accommodated to the practice prevailing in England," that the Scotch Universities "may justly claim for their Graduates a legislative enactment entitling them to practise Medicine unfettered in all parts of her Majesty's dominions." They ask for no exclusive right, but for free competition with the Fellows and Licentiates of the Incorporated Colleges. The Medical faculties have come to an arrangement on every important point involved in a uniform system of graduation, accommodated, in a great measure, to that of England. The leading features of this arrangement form the concluding portion of the statement which has been sent to every Member of Parliament. It will be high time to discuss their details when we find that the New Bill is likely to come before the Legislature this year.

The Chinese war has caused great activity at the offices of the Army Medical Department, and all the arrangements have been completed within the last few days for the Medical service of an army of six thousand men. It has been necessary to make provision for a very large amount of probable sickness, as during the last Chinese campaign every man in the force was on the sick list on an average four times. In other words, there were four hundred admissions to hospital for every hundred men employed, while the loss amounted to

one-third of the total number. Every exertion is being made to procure the best possible medical staff, and the principle of competitive examination, so successfully pursued by the East India Company, has been adopted by the Director-General. The first examination on this principle has resulted in the filling up of fourteen vacancies from twenty-five candidates. The questions constituting the written examination will be found in another column, and it must be acknowledged that this examination was an admirable test of the knowledge of the candidates. Each candidate went through an hour's oral examination in addition, the examiners being Dr. Andrew Smith, Dr. Dumbreck, and Staff-Surgeons Pilleau and Reed. The same method will be adopted at the second examination, which will be held at the end of April or the beginning of May, when it is expected that from ten to fifteen vacancies will be filled up.

The annual meeting of the Medical Society of London on Monday passed off very well. Mr. Adams selected subcutaneous surgery as the subject of the oration, and produced a very interesting practical paper. The gold medal was presented to Mr. Canton for his paper on diseases of the spine, and a silver medal was awarded to Dr. E. Smith, for his services as secretary. The members afterwards dined together.

We have received several communications on the late deaths after eating the "locust nuts," or "Egyptian beans," to which we alluded last week. One correspondent suggests that the larvæ of insects, which are sometimes found in the pods, may possibly cause gastric irritation; and a pod has been forwarded to us, supposed to contain some of these larvæ. The specimen, however, has been examined with great care by Dr. Aitken, who kindly informs us that:—

"What appear on examination with the naked eye, or with a lens of a low power, to be 'larvæ,' or 'maggots,' are in reality concrete forms or masses of the natural pulpy secretions of the fresh pod. They appear to be composed of the sugar, gum, and brown vegetable extract, which form by far the largest percentage in an analysis of this highly nutritious article of food. The concretions, which so much resemble larvæ, are seen to be composed of irregular crystalline masses when viewed with a power of 150 diameters, exactly resembling masses of candied sugar, as sold at the shops under the name of 'sugar candy.' When a longitudinal section is made along the pod, in the space between its central cavity and outer surface, numerous spaces are to be seen of large size, in the dry condition of the pod. These spaces in the fresh pod are the natural receptacles of the pulpy secretion. From these lateral cavities or receptacles the moisture dries up, so as to leave in the dry specimen empty spaces. On the walls of these lateral spaces, in the dry specimen, the crystalline masses hang (by filamentous substance) together, as if entangled in cobwebs."

There are two pods known as "locust nuts." They both belong to the sub-order *Cesalpinea*, of the order *Leguminosæ*. One is the pod of the *Ceratonia siliqua*, or the "Algarola bean." It is used mostly for the feeding of horses, and the tree is known as the "carob-tree," and sometimes as the "locust-tree," or "St. John's bread-tree," from a tradition that the pulpy matter surrounding the seeds supplied food to St. John in the wilderness; indeed that these were the locusts he fed on, with wild honey, and not the insect, as is often supposed. The other pod is from the *Hymenaea combaril*, the West Indian locust-tree, the pulpy matter of which is highly nutritious.

Dr. Aitken adds:—

"We know that the bark of this tree is anthelmintic. We know, also, that plants of this family furnish highly irritant and purgative principles. We know, also, that the hard seeds are not digested, but are rejected. May they not contain some deleterious alkaloid or other chemical product, whose poisonous or irritant properties may be developed by the gastric juice of some stomachs; or may not the locust nuts eaten by

those who are reputed to have died, have been pods of some other poisonous legumen? An extensive examination of a chemical nature into the properties and mode of preservation of these fruits is demanded; for such inquests as those which leave the poisoning of the two boys with 'locust nuts' still inexplicable, are highly unsatisfactory."

In our article last week on the threatened murrain of cattle, we expressed our fears "that the disease has been by this time introduced into this country." We have since been informed, on very high authority, that for some weeks past pleuro-pneumonia has been present in its severest form in some of the Cow-houses at Limehouse, Paddington, and Streatham; and that in one district it has destroyed nineteen per cent. of what the French call the bovine population, and in one establishment has killed *all* the cows. We hope to obtain more definite information before very long on this subject, especially as to the first cases of the disease which appeared. In the meantime we are happy to hear that the Board of Health are employing a Medical Inspector in the matter, whose report will be brought before Parliament. An inquiry at this stage of the epidemic is something like locking the door after the steed is stolen; but much good may be done by impressing on the cow-keepers the means we suggested last week for checking the progress of the epidemic. There does not appear to be much apprehension prevailing in London at present among cattle-owners as to the disease. Indeed it is spoken of rather in the past tense; but if the lesson should prove a severe one, it will not be lost if it teach the public that we must have a Board of Health properly constituted, and entrusted with sufficient power to act in time when contagious epidemics are approaching our shores.

The death of Dr. Hume having caused a vacancy among the Commissioners of Lunacy, Lord Shaftesbury and the Lord Chancellor have filled it up by appointing Dr. Nairne as the new Commissioner. This has led to that gentleman's retirement from St. George's Hospital, he having resigned on Wednesday, and a vacancy among the Physicians there. This will be filled up, as a matter of course, by the appointment of Dr. Fuller, now the Senior Assistant-Physician. There will be a vacancy for an Assistant-Physician, and it is expected that Dr. Ogle, now Physician to the St. George's and St. James's Dispensary, and Curator of the Museum at St. George's, will be elected without opposition. It is said that Dr. Nairne very nearly obtained the appointment as Commissioner of Lunacy at the last vacancy, when Dr. Wilkes was selected. It is worth about £2000 a-year, the salary being £1500, and the allowance for travelling expenses very liberal.

REVIEWS.

The Edinburgh University Essays. By Members of the University. Edinburgh. 1857.

The publication before us, uniform with, and suggested by, the Oxford and Cambridge Essays, is the first of the series. This volume will bear comparison with the emanations from our English Universities. Six Essays are non-Medical; but we opine that few of our readers so far restrict themselves to Professional reading that they will not be interested in the sketch of that great man, Sir W. Hamilton, penned by his late assistant, Mr. Baynes. Two of the Essays are, however, more strictly Medical—the one by Dr. W. T. Gairdner on "Homœopathy," the other by Professor George Wilson on "Chemical Final Causes."

Dr. Gairdner enters the lists against Hahnemann as a fair and courteous knight, combating his arguments and opinions in a dispassionate and candid spirit. The discussion may be an answer to those who, since Dr. Simpson's exposure, have been compelled to repudiate infinitesimal doses from their

sheer absurdity, but who still cling to other Homœopathic doctrines and dogmas.

In Professor Wilson's Essay there is evidence of careful and original thought, so illustrated by happy metaphor that it must interest not only the general reader, but also the Chemist and Medical Practitioner. The object of his Essay is "an endeavour to exemplify a mode in which we may hope to discover why living creatures consist of certain chemical substances rather than others." Thus it goes on to prove that certain elements have been employed for the construction and ever-changing circumstances of living bodies, not because they are most abundant or most universal, but because of their perfect suitability for the purposes required. Take, for example, phosphorus, so largely present in animal tissues; the evidence so furnished is quite sufficient to show, that in the present state of knowledge we are acquainted with no other element which, by its various capacity for combination, and the mutability of its several compounds, could minister to the 'unchanging change' of the living body." Nitrogen and iron are treated after a similar fashion; and the argument applied to them is scarcely less striking than with phosphorus.

The practical deduction with regard to the latter substance may be, that since Chemists have elicited so much of interest concerning it, and shown it to be of so great importance in the animal economy, it behoves Physicians to study more carefully its therapeutic properties. We know little as yet to what uses the phosphoric acids may be applied as medicinal agents; but the presumption is that they are not valueless. Dr. Wilson himself suggests the direct application of phosphoric acid to non-acid calculi, as a substitute, in some cases, for the knife, phosphoric acid having a solvent action on these concretions, while it has no irritating action on the living tissues.

We have no hesitation in expressing our belief that the Medical celebrity of the University of Edinburgh is amply sustained in the essays before us.

A Descriptive Catalogue of Preparations illustrative of the Diseases of the Ear, in the Museum of Joseph Toynbee, F.R.S. London. 1857. Pp. 127.

THE Museum of Mr. Toynbee has been long known to the Profession in London, indeed to most British Surgeons who have been specially interested in the study of Diseases of the Ear, and is one of the "Medical sights" best appreciated by our Continental brethren visiting the Metropolis. The remarkable industry with which Mr. Toynbee has pursued his favourite study may be estimated from his statement, that since the year 1839 he has dissected the ear in 1659 subjects, 495 being deaf persons, 654 diseased ears, the history of the cases being unknown, and 510 healthy ears. Conclusions drawn from such a basis of facts and such a standard of comparison, must be indeed worthy of respect. We therefore append them in the author's own words:—

"I. The discovery of the existence of osseous tumours in the external meatus and their structure.

"II. The detection of the presence of molluscous tumours in the external meatus; a disease which, in consequence of the accompanying discharge of mucus, has hitherto been confounded with 'otorrhœa.'

"III. The abolition of the terms 'otitis' and 'otorrhœa,' and the substitution of names indicating the tissue affected, and the peculiar nature of the affection.

"IV. The discovery of the existence of the dermoid layer of the membrana tympani, which plays so important a part in the diseases of that membrane. It was previously supposed that the epidermoid layer was in direct contact with the fibrous layers.

"V. The ascertaining of the true relations of the two fibrous laminæ of the membrana tympani, and the existence and offices of the 'tubular tensor tympani ligament.'

"VI. The construction and application of the artificial membrana tympani in cases of perforation or destruction of the natural membrane.

"VII. The demonstration that the functions of the ossicles are analogous to those of the iris of the eye, modifying the access of sonorous vibrations as the latter does the undulations of light, attuning the labyrinth for the reception of either loud and harsh, or very low and very delicate vibrations.

"VIII. The establishment of the existence as a disease, of membranous and osseous ankylosis of the stapes to the fenestra ovalis, one of the most common causes of deafness.

"IX. The proof that the Eustachian tube remains always closed, except during the momentary act of swallowing, when its muscles cause it to open.

"X. The use of the 'otoscope' as a means by which the condition of the Eustachian tube may always be diagnosed, without the use of the Eustachian catheter.

"XI. The various diseases which give rise to caries of the petrous bone, and implicate, in their progress, the dura mater, the cerebrum, and the cerebellum, have been described, their nature and extent indicated, and means for their melioration suggested."

It is only necessary to add, that the Catalogue before us contains a brief description of 856 preparations in Mr. Toynbee's Museum—that we can speak after repeated personal examination of the extreme beauty and interest of many of the specimens—and that, as Mr. Toynbee is always most obliging in showing his collection to any member of the Profession, he has just and undoubted claims upon the gratitude not only of his Medical brethren, but of all who may be benefited by the increased knowledge his labours have bestowed.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON THE INFLUENCE OF SURGICAL AFFECTIONS UPON ANIMAL TEMPERATURE.

By M. DEMARQUAY.

M. DEMARQUAY observes that although many observations have been made upon the modifications of the temperature produced by internal diseases, with the exception of Hunter's upon inflammation, and some researches upon the effects of ligatures on large vessels, nothing has been done with respect to surgical affections. He treated upon the subject in his inaugural dissertations in 1847, and since then has continued to pay attention to it; and the present memoir is an account of some of the results of his observations.

The pyrexia following amputations and other operations is accompanied by an elevation of temperature proportioned to the amount of reaction; but when the case becomes complicated by other phenomena, as plebitis or erysipelas, the temperature may undergo notable variations. Thus, in a case of amputation of the thigh, followed by phlebitis and purulent infection, the thermometer has risen from 97° or 99° to 104° Fahr.; and although this increase may seem in itself but trifling, yet the observations of Andral and others have noted but a few degrees of elevation only even in the intensest fevers. If, however, the elevation of the general temperature is inconsiderable, this is not the case with respect to the local temperature. Thus, in phlegmon and erysipelas, comparing the condition of the affected parts with that of the healthy ones, it has been found that while the general temperature of the body may have undergone no modification, that of the affected part has undergone a notable increase, exceeding that of the neighbouring parts by from 2° to 5° C. All serious wounds which produce febrile action induce an elevation of general and local temperature, but when the membrane covering the granulations has become well organised, the temperature is then found to be like that of the surrounding parts; so that ice applied under such circumstances would abstract normal, not morbid, caloric. Experimenting upon dogs, too, the author has observed that the application of ice leads to a considerable falling of the thermometer in the case of subcutaneous wounds. The same experiments showed that a wound that had undergone such diminution in its temperature, quickly recovered this, and went beyond it, the temperature of the wound thus undergoing a series of elevations and depressions, according to the quantity of ice employed, and its degree of fusion. It is evident that such a powerful modifier requires great reserve in its employment; and most of the Paris surgeons reasonably prefer in the case of great breach of surface, tepid irrigations to these freezing applications. As to the temperature in aneurisms, MM. Demarquay and Monneret have on several occasions observed in arterio-venous aneurisms of the lower extremity, an elevation

of from 1° to 2½° C.; but they have never observed a similar difference in the case of such aneurism existing at the bend of the elbow. When in a limb, the subject of aneurism, the circulation has undergone no considerable disturbance, no important variation of the animal temperature is observable; but when complications, such as phlegmon, are present, an elevation of 2° may take place. After ligature of the femoral and humeral arteries, the author has found a diminution of temperature to take place, and the experiments upon animals which he has made with MM. Duméril and Lecoq demonstrate the accuracy of the assertion, that every ligature of an important artery, performed so as to avoid all injury to the veins and nerves, gives rise to a diminution of the temperature of the limb beyond the ligature. *A priori*, a considerable modification in the temperature of a limb might be expected in limbs suffering from senile gangrene; and the author has been somewhat surprised to find only a difference of 1½° or 2° C. between the two limbs, except in one case, when the difference amounted to 5°.

The following are the conclusions of the memoir:—1. Purulent infection and erysipelas give rise to an elevation of 2° to 3° C. 2. Circumscribed inflammations, as phlegmon or local erysipelas, give rise to an increase varying from 1° to 5°. Ice quickly gives rise to a temporary diminution, but the parts afterwards not only recover their former temperature, but exceed it. 3. A true aneurism, if the limb is healthy, gives rise to no change of temperature, but arterio-venous aneurism, and especially in the lower extremity, increases it by 1° to 2½° C. 4. Hunter and his school have examined into the effects of ligature of vessels on the temperature, but have arrived at contradictory results. From my observations it follows that ligature of the artery and the vein in arterio-venous aneurism of the lower extremity, gives rise to an elevation of temperature; while when the principal artery of a limb is alone tied, there is always a diminution of temperature. 5. In senile gangrene there is always a diminution of temperature of from 1° to 5° C., in the parts situated above the mortification.—*Gaz. des Hôp.* 1856, No. 123, and *Comptes Rendus*, XLIII., No. 13.

PHOSPHATE OF LIME IN SPINAL CURVATURE.

By M. PIORRY.

M. Piorry states that he has long been in the habit of administering phosphate of lime with advantage to rickety patients, suffering from curvature of the spinal column. He gives it in the form of very fine filings of fresh bones. About one ounce is given daily, either in milk, or better still in rice-milk, which effectually disguises all disagreeable taste. He does not attribute all the improvement observed to this, as a highly nutritious diet is simultaneously employed: but certain it is, that in several patients in whom the spinal column had continued to deviate more and more every year, and who were subjected during several months to good regimen, free exposure to light, a dry and warm temperature, and especially employing the phosphate, the progress of the affection has become completely arrested. And the numerous cases in which the treatment has proved of benefit in Potts's disease, suggest that it may be of great utility in the rickets of childhood, and to osteomalacia of adults. M. Piorry also believes it may prove useful in women threatened with the softening of the bones during pregnancy, combining it then with iron. Likewise children, when nutrition is defective and the limbs are distorted, may benefit by it; while in certain tuberculous subjects it may favour the process of calcification.—*Gaz. des Hôp.* 1856, No. 139.

AFFECTIONS OF THE SHEATHS OF TENDONS.

By M. THIERRY.

M. Thierry recently drew the attention of his class to an affection of the sheaths of tendons, described by Velpeau under the name of *Aï*, and observed in workmen who employ twisting movements and wield heavy hammers. Thus, gold-beaters and rope-twisters are liable to it. On feeling the region which is swollen, or putting it into action, a sensation of crepitation is imparted, like that felt by crushing snow between the fingers. Its seat is the tendinous sheaths of the muscles of the forearm, especially of the extensor and abductor pollicis, and the radialis externus. The affection may be cured in about a fortnight by the application of compresses, moistened with the essence of turpentine, and kept on by means of a moderately tight bandage.—*Moniteur des Hôpitaux*, 1856, No. 104.

EXCERPTA MINORA.

Honey as an Exeipient for Pills.—M. Thibault believes that much of the disappointment following the employment of pills arises from their, as ordinarily prepared, acquiring a degree of induration that prevents their solution, and enables them to traverse the alimentary canal unchanged. To prevent this he recommends the employment of honey: pills prepared with it, always remaining soft, however long they may be kept.—*Bulletin de Thérapeutique*, Tome lii. p. 79.

Tincture of Iodine in Serous Effusions.—M. Vulpré relates some cases in proof of the great efficacy which sometimes follows the external application, day by day, of tincture of iodine, in order to favour absorption of serous fluids, as in chronic pleurisy and hydarthrosis, several weeks being, however, often required to obtain the beneficial result.—*Ibid.*, p. 80.

Local Applications in Erysipelas.—Dr. Livezey observes that he has tried comparatively all the local applications usually recommended in erysipelas; and that while finding none of them infallible, he believes the tincture of iodine to be the most reliable. It should be preceded by an emetico-cathartic, especially in the frequently occurring bilious cases, and should be followed by the tr. ferri mur. The latter, regarded by some as a specific, is so in his opinion only after the bilious and highly inflammatory symptoms are removed, when quinine is just as useful. Dr. Livezey, however, wishes to recommend to notice a strong, saturated tinct. lobeliae, applied frequently by saturating muslin, or fine linen cloths, and which he believes will prove more satisfactory than any other application.—*Boston Journal*, vol. lv. p. 262.

Iodine in Rheumatic Nodosity of Joints.—M. Lasègue relates some interesting cases in which the employment of the tincture of iodine seemed to exert a most favourable influence in the nodosity of joints, which sometimes constitutes so distressing a sequence of chronic rheumatism, and that in cases in which the iodide of pot. had failed to give relief. He always gives it at meals in a little sugared water, or better still, Spanish wine, which masks its taste well, beginning with 8 or 10 drops twice a day, and gradually increasing to a dram or a dram and a half.—*Archives Générales*, tom. viii. pp. 300—312.

Perechloride of Iron in Hæmorrhoids.—M. Thierry states that he treats hæmorrhoids, even when large, by first blistering them, and then applying the perechloride of iron to the denuded surface, under the influence of which they shrink and disappear. The cure may not be radical, and they may reappear under the influence of the causes that originally produced them; but this is only the case after a considerable period, and in the meantime health is restored and occupation resumed. M. Thierry employs the same treatment with success in varix.—*Union Méd.*, 1856, No. 101.

Treatment of Erectile Tumours by Nitrate of Potash.—M. Mangelot, having accidentally heard of the dispersion of a cutaneous congenital nævus by means of the application of nitrate of potash, resolved to try its efficacy in the case of his own infant; the nævus in this case, though small, increasing in size. The moistened finger was dipped in the powder, and the nævus gently rubbed with it. A small bulla, as observed in herpes labialis, was formed, and the tumour shrank away, so that one other application sufficed for its entire suspension. In four other cases the same results have followed the use of the nitrate of potash for nævi of the face, and in a fifth case, in which a nævus, 4 centimetres in diameter, existed on the shoulder, the same application removed it in two months.—*Bulletin de Thérapeutique*, Tome 52, p. 37.

GENERAL CORRESPONDENCE.

HOW CHLOROFORM MAY CAUSE DEATH.

[To the Editor of the Medical Times and Gazette.]

SIR,—The Profession is much indebted to every one of its members who has courage to make known the accurate particulars attendant on ill-success in practice. Mr. Paget's very clearly reported case of death ensuing from the administration of chloroform is practically of much value.

In the first place, it proves that death did not arise—as

asserted by some—from apnœa; secondly, it is clear that it resulted from failure of the heart's action.

How did this arise, and how may such a catastrophe be avoided? These are important questions, which have been previously resolved by one, and which I again beg to refer to.

I believe that I was the first to point out the necessity of a careful examination always being made of the nervous condition of a patient prior to the administration of chloroform, in my little book, "Aids during Labour," p. 78. Surely Mr. Paget's case, independent of others recorded, justify my remarks, "an emotional state may produce a fatal syncope, or may cause such depression as to permit of a small dose of chloroform, sufficiently diluted, increasing it to a fatal extent." This happened in the fatal case in Edinburgh, which I then commented on (*Medical Times and Gazette*, p. 19, January, 1856); also in the fatal case at St. George's, in which Dr. Snow's inhaler was used with every precaution, (*Medical Times and Gazette*, vol. i. p. 516, 1854, and "Aids during Labour," p. 76.) In the Edinburgh case "the patient was very apprehensive about chloroform on this occasion, though she had taken it several times before. She took two or three whiffs, and became insensible, falling on the floor." Here, too, we read that the poor lad was "of delicate constitution, and of nervous, timid disposition." That "he was alarmed at the thought of being put to sleep, and of what would then be done, and was very averse from taking chloroform." The rapid influence of the chloroform upon him favours this supposition. The pulse failed to be a warning prior to the cumulative effect of chloroform to a fatal degree, which justifies a previous remark of mine, "that the pulse may cease before respiration; or in other words, that the respiratory efforts may be the latest evidence of remaining vitality." *Op. cit.* p. 78.

How, then, is a fatal result to be averted under similar circumstances? I would very urgently beg to advocate the invariable use of a diffusible stimulant prior to the administration of chloroform; and when a nervous state exists, to wait until it is overcome. I have remarked, "It would be well if the pulse and state of the patient just before the administration of chloroform were always carefully examined; and when a weak excited pulse exists, to endeavour first to tranquillize the system by a diffusible stimulus, then to accustom the patient to the chloroform inhaler, by using it for a moment or two, and withdrawing it, and endeavouring to restore confidence as much as possible." (*Op. cit.* p. 77.) In this case, although "he was persuaded to inhale it," it was not done "without resistance." I have recently referred to the use of stimulants with the administration of chloroform. (*Medical Times and Gazette*, p. 22, January 3, 1857.)

The great importance of the subject must plead my apology for again intruding on your columns. I am, &c.,

T. R. PRETTY, M.D.

31, Bayham-terrace, Camden-town, March 9, 1857.

"LOCUST BEAN POISONING."

[To the Editor of the Medical Times and Gazette.]

SIR,—I see in the *Medical Times and Gazette* of this week an article referring to "another case" of poisoning by the locust bean, which took place at Bolton. Although in this instance an open verdict was returned, I am inclined to think that the bean can produce such symptoms as those described, from a case that came under my notice in this town, not long ago.

On the 4th of February last, I admitted into the Brighton Dispensary a boy named Benjamin Woodham, aged fifteen. It appeared that on the 2nd of February he complained of headache and constipated bowels. On the morning of the 3rd, his father administered to him from half a pint to a pint of the infusion of "locust beans." The boy was seized in the course of the day with violent vomiting, and pain in the epigastrium; and when I saw him on the 4th, in addition to all the symptoms of intense irritation of the intestinal canal, he was covered from head to foot with an eruption of the worst form of urticaria. I could not refer his sufferings to any other cause than that of the locust bean.

A brisk dose of calomel, followed by neutral salts, quickly removed all his symptoms, and in the course of two days he was quite well again.

I am, &c.

ALMERIC W. SEYMOUR, M.D.

Brighton, March 10, 1857.

THE CHLOROFORM USED IN MR. PAGET'S CASE.

[To the Editor of the Medical Times and Gazette.]

SIR,—Inquiries having been made respecting the quality and quantity of the chloroform administered in the case which you published for me last week, I beg you to allow me thus to answer them.

The chloroform was manufactured by Messrs Duncan and Flockhart of Edinburgh; and portions of the contents of the same bottle have been used in three cases, during the last week, without producing the least inconvenience.

The whole quantity consumed was about three fluid drachms; but it is not possible to say how large a portion of this quantity was wasted.

I am, &c.

JAMES PAGET.

24, Henrietta-street, Cavendish-square, March 10, 1857.

CAUSE OF THE SOUNDS OF THE HEART.

[To the Editor of the Medical Times and Gazette.]

SIR,—As I observe that a keen controversy is being carried on regarding Dr. Halford's experiments, and the conclusions he draws from them as to the causation of the first sound of the heart, noticed by you some months ago, I avail myself of your widely-circulated columns to state the impression made on me, and I think also on Dr. Goodfellow, by the experiments at the Middlesex Hospital. I believe I am right in stating that the accuracy of Dr. H.'s views as to the mode and direction of the heart's contraction was generally admitted, but there was considerable difference of opinion as to his main conclusion, that the first sound is *wholly* caused by the tightening of the valves. Though in opposition to the opinion of Dr. Seth Thompson, from whom I seldom differ without misgivings as to my own verdict, I felt convinced, after repeated and very careful trials, that the first sound was not *wholly*, though in great part, obliterated. There was still "a remnant of sound," quite distinct from the friction of the heart against the stethoscope, and quite resembling that produced by a mass of contracting muscle, *e. g.* the fleshy part of the thumb, in contact with the ear or the stethoscope. Still I quite agree with Dr. Thompson, that a lecture-room crowded with spectators, is not the place for making accurate deductions from experiments requiring perfect stillness quite as much as nicety of manipulation.

I am, &c.

A. P. STEWART.

Grosvenor-street, March 10, 1857.

ON THE MODE OF ACTION OF ATROPIA ON THE IRIS.

[To the Editor of the Medical Times and Gazette.]

SIR,—Several interesting papers on the action of atropia on the iris have lately appeared in your Journal, and in the present obscure condition of the question an hypothesis may chance to get a welcome.

The atropised eye has not only a dilated pupil, its vision also is impaired. The eye is misty, and cannot read print easily seen by its healthy fellow. This is often referred to diminished sensibility of the retina, but it is mainly, if not altogether, due to the width of the pupil and the loss of power in the eye to adapt itself to near vision. That it is in part due to the large pupil admitting too many and too divergent rays is shown by its being improved in a dusky light, and in looking through a hole—smaller than the dilated pupil—in a black card held close to the eye. But it is more especially due to the inability of the eye to adjust itself to near vision. The defective sight is more marked the closer the object, and diminishes with distance. As the influence of the atropia is wearing off, while yet the difference between the two eyes is decided with a near object, scarcely any is perceived with a distant one. The type appears smaller to the atropised eye than to its fellow at the same distance. Hence vision with both eyes is confused, and for reading the dilated eye must be covered. The object has to be removed a little further from the microscope with the atropised eye, but the focus having been adjusted, vision is as good as with the healthy eye.

The eye is altered as if for distant vision. The pupil dilates, and at the same time, I believe, the lens recedes and diminishes the distance between it and the retina.

The erectile structure of the iris has been of late too much overlooked in discussing its movements, the singular softness of which appears to imply something more than muscular contraction.

The iris may be congested and the pupil contracted by relaxation of its arteries letting more blood into it, or by compression of its veins impeding the flow from it, and it may be emptied of blood and relaxed either by contraction of its arteries or by relaxation of its veins, or both conditions may co-operate.

The ciliary processes have a mixed erectile and muscular structure, not unlike that of the iris, and it is a feasible supposition that the lens is advanced by their turgescence, conjoined with contraction of the ciliary muscle, and recedes on their relaxation; the former being an active and the latter the quiescent condition of the parts.

The sympathetic nerve supplies at the same time contractile power to the arteries and to the radiating fibres of the iris, and it seems not improbable that in ordinary dilatation of the pupil the same reflex influence stimulates conjointly the contractile arteries entering the iris and the radiating fibres. These being always associated in action, we can understand that an agent directly contracting the arteries entering the iris will draw into movement by sympathy its radiating fibres, the contraction of which is made easy by the emptiness of the erectile tissue.

Professor Jones had found that atropia constricts the small arteries when applied to them directly; and in several experiments which I have made with earthworms and with the small intestines of rabbits, this alkaloid has appeared to quicken the contraction of the part to which it is applied. It certainly is not a direct paralyser, as has been commonly inferred, either from its supposed mode of action on the iris or from its curative influence in spasmodic diseases.

My hypothesis is that atropia reaches by imbibition the arteries entering the iris, contracts them, and impedes the flow of blood into its erectile tissue. The radiating fibres are then drawn into action by functional sympathy with the contracted arteries.

Sinking deeper into the eye, the alkaloid reaches the ciliary processes, and relaxes their erectile structure, the lens recedes, and causes distant vision. For near vision the pupil contracts, and the lens advances. The veins of the iris and ciliary body are at the same time probably compressed, as suggested by Dr. Wallace, causing turgescence of the iris and ciliary processes. The ciliary and iridial muscles concerned in these associate movements receive their nervous supply from the same source, or third pair.

I am, &c.

Cork, February 28, 1857.

ALEXANDER FLEMING.

ON THE EFFECT OF CHLOROFORM UPON AMPUTATION WOUNDS.

[To the Editor of the Medical Times and Gazette.]

SIR,—As Mr. Holmes, the Registrar of St. George's Hospital, has renewed the controversy respecting the effect of chloroform on the results of operations, I rely on your permitting me to reply briefly to his letters in the last number of the Journal; and I promise to confine myself strictly to a reply. Another opportunity will enable me to go more at length into this important question, and to add to the statistical information which I have already given in regard to it.

Mr. Holmes has lately published some valuable statistics respecting the amputations at St. George's Hospital; but the extraordinary circumstance in his renewed correspondence is, that the very facts from which he deduces conclusions favourable to the view he has taken of the subject in dispute, constitute, in my opinion, the strongest support of the contrary view. In the first place, he brings forward a mortality, after amputations at St. George's Hospital, of 32½ per cent., as a rate only a little above the average (meaning, I presume, the average before etherization was introduced), whereas I have given satisfactory reasons for believing that it is at least 10 per cent. above this average. In the same manner, and for the purpose of "dispelling the fears" of Surgeons, Dr. Snow brought forward, and before the origin of the supposed "epidemic pyæmia," a numerous list of secondary and selected amputations, showing a mortality of 27 per cent. after the use of chloroform, which is, probably, a

higher rate than 35 per cent. as regards the usual proportion of primary and secondary unselected operations in Hospitals.

Again, although Mr. Holmes accounts for the increased mortality by the supposition that pyæmia has been epidemic during some part of the time subsequent to the introduction of chloroform, he publishes a statement of the cases of pyæmia in St. George's Hospital during the last thirteen years (a period including the comparative lists of mortality before and after chloroform), flatly contradictory of this supposition, as will be evident by the following thirteen sets of figures, representing the whole number of cases of pyæmia that occurred in each year—19, 15, 16, 18, 11, 12, 13, 16, 7, 21, 26, 19, 11. There is, indeed, a slight increase, but assuredly not such as would indicate the breaking out of an epidemic, and which cannot be easily accounted for by the increased number of surgical patients in the Hospital, and the agency of a new morbid cause, chloroform.

Mr. Holmes congratulates himself on the efficacy of his evidence respecting the want of connexion between pyæmia and chloroform. He alludes to the opinion I had expressed that the secondary injurious effects of chloroform in certain specified operations may be principally owing to the predisposition to pyæmia caused by it. This opinion, which I expressly said, was one formed from general impressions, and requiring confirmation from careful statistics, is of little or no importance as respects the great question under discussion. The important facts are, that the mortality from the severer amputations in the London Hospitals has amounted, during the last three years and a half, to 34 per cent., and in the provincial hospitals to nearly 30 per cent., the whole number of cases being about a thousand; that the general use of chloroform is an adequate cause of this increase, as, from the great number of sudden deaths and the symptoms produced by it; there can be no doubt of its poisonous and depressing properties; and that no other new cause of mortality can be adduced. On my first perusal of Mr. Holmes' statistics of pyæmia, it appeared that they had a tendency to create a doubt that the principal injurious action of chloroform was what I had conjectured; but on re-perusing them, I find I was too hasty in coming to this conclusion. In 1844 there were 12 cases of pyæmia in St. George's Hospital, seven of which occurred after operations. In 1855 the same numbers appear, viz. 12 and 7; but there is this material difference between the two, that in the first instance, seven deaths followed operations of all kinds, whereas in the second, the seven deaths were all from amputation. A prominent mistake of Mr. Holmes, throughout this discussion, has been his restricting his view too much to the statistics of St. George's Hospital, which are much too limited to be authoritative. If he will refer to the reports from the other hospitals, he will find recorded many other causes of death after amputation than pyæmia, and will see that they are not altogether imaginary. We often, for example, read amongst these of death from "exhaustion;" and surely, an agent which produces "horrible" prostration (to use a term now applied to it, since its rival amyline has appeared on the scene), is likely enough to cause, or assist in causing exhaustion.

The Profession is obliged to Mr. Holmes for the trouble he has taken in collecting these Hospital statistics; but I must strongly object to his employment of language calculated to lead a cursory reader to suppose that he has succeeded in his argument at the very moment of his furnishing facts subversive of it. This cause is calculated, besides, to prolong the existence of one of the most pernicious errors that have ever crept into the practice of medicine.

London, March 7th. I am, &c. JAMES ARNOTT.

POOR-LAW MEDICAL REFORM.

[To the Editor of the Medical Times and Gazette.]

SIR,—The present aspect of political affairs renders it desirable to postpone the general meeting of Poor-law Medical officers until the forthcoming elections have taken place. In the meantime, I trust every Union Medical officer will make it his especial business to lay the grievances of the Poor-law medical staff clearly and forcibly before the candidates for parliamentary honours. Let the Profession positively refuse to vote for any man, unless he give a distinct promise that he will do his utmost to obtain justice for us. Let each of us point out the iniquity of the system which compelled 290 medical men to throw up their appointments in 1855, and 249

in 1856, and which allows an average payment of 2s. 9½d. only for attendance on the sick poor in an illness of a month's duration. That this paltry sum of 2s. 9½d. is to cover the cost of drugs, instruments, pharmaceutical appliances, servant, horses and carriage, tolls and taxes, besides numerous other inevitable expenses incidental to a medical practice; that the education required to qualify and render us eligible for our important and responsible duties, is laborious and dangerous as well as expensive, and involves the sacrifice of several years for its attainment; that the duties are most arduous, demanding attendance by day and by night, and exposure to every variety of weather which the recurring seasons can produce, and to every morbid poison and source of infection and epidemic disease by which life can be shortened; that the remuneration for medical attendance on the inmates of 66 prisons, is at the rate of 14s. 5½d. per head, or probably twenty times that sum for each case of actual illness, clearly showing that more sympathy and care are evinced in procuring professional aid and medicines for the convicted offender, than for the sick and innocent poor; and that attention in the former case is recognised as worthy of its reward, while in the latter it is deemed so unimportant that it may with perfect indifference, as far as the executive is concerned, be the occasion of loss. That it is the very natural result of this system that the public suffers both in the diminished service that it receives from the labouring class, and in the increase of poor rates; in confirmation of which it has been stated, "the number of paupers made paupers by sickness constitutes 72 per cent. of the total of paupers."

Let the Union Medical Officers be firm in their resolves to obtain justice, and success will ultimately crown their efforts. It will be apparent that our exertions have not been entirely fruitless, from the fact, that last week the Poor-law Board issued a circular letter to each Union, recommending a modified form of the "district medical relief book," by which our labours will be slightly lessened, as each sheet is ruled for a month, instead of a week; it is a copy of one of the forms transmitted by me to the Poor-law Board in July last, slightly altered, but not improved. The large space left at the end of each line for observations would have been better divided into separate columns, and placed in juxtaposition with the necessaries ordered for each week. By the substitution of this form, the ratepayers will be considerable gainers, as there are 2597 district medical books constantly in use, which will last at least twice as long as formerly.

In my last letter I advised the Union Medical Officer to request an order from the relieving-officer or overseer, when required to attend in consultation paupers out of his district. This has already been acted on by a gentleman in this neighbourhood, in the case of an arm presentation, for which he is entitled to receive £2; whereas, by the old plan, he would have had an approving conscience only for his reward. Let every Union Medical Officer do likewise, and some of the savings in the union books may pass from the ratepayers' pockets into those of the profession.

In the name of the Poor-law Medical Reform Association I beg thus publicly to offer our most cordial thanks to the students of nearly all the Hospitals and Schools of Medicine in England, for their noble conduct in voluntarily coming forward to tender us their aid in this prolonged struggle for justice. I have also the pleasure to acknowledge (as particularly requested) the receipt of £2 17s. from the Students of St. Thomas's Hospital, which sum has been carried to the account of the Association. I am, &c.

12, Royal-terrace, Weymouth, RICHARD GRIFFIN.
March 7, 1857.

WATER OF THE PUTRID SEA.—At a meeting of the Geographical Society on Monday week, in a paper by Captain Osborn, R.N., on the geography of the Sea of Azoff, he says, in reference to the Putrid Sea, that it presents a remarkable contrast to the Sea of Azoff. Its waters are clear and blue, and so extremely salt as to irritate the skin. The offensive smell of the Putrid Sea he attributes to springs of naphtha, occasioned, as he conceived, by volcanic action, of which there were several indications. Though that sea has obtained from its smell the name of Putrid, residence on the coast is not unhealthy, and an analysis of its water does not show it to possess any noxious properties.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, February 17, 1857.

(Concluded from page 249.)

Dr. BRINTON read a report on Mr. Part's specimen of

ULCER OF THE ŒSOPHAGUS.

It had been found, on more minute examination, to be a simple, and not a cancerous, ulcer. The mass which had looked most like medullary cancer proved to be a portion of lung-tissue, which had passed into the ulcerated opening.

Dr. Harley showed

DISEASED SUPRA-RENAL CAPSULES FROM A CAT.

The specimens had been removed from a strong, fat, and healthy cat, from whom it had been proposed to extirpate the organs. Quite unexpectedly they were found to be diseased, having spots of chalky deposit throughout their structure. Dr. Harley thought they might be considered to be quite destroyed as to function, and deemed the case an exception to the supposed law that ill health necessarily followed disease of these organs. He avowed a strong opinion that the supra-renal capsules were not vital organs, and also that the connexion between disease of them and bronzing of the skin was by no means close. He alluded to a case which had occurred at Naples, in which no supra-renal capsules existed, and yet the patient was of natural hue of skin; and to another which had been mentioned by Dr. Bennett, in which the patient was brown during life, but the glands were found healthy at the autopsy. He thought M. Brown-Séguard had been very unfortunate in his experiments on animals in the extirpation of these organs, for in a rat from which he had extirpated them three weeks ago, the animal was still alive. He referred also to a case of Dr. Peacock's, in which the capsules were found entirely disorganized, and yet during life no bronzing had been noticed.

Dr. BRISTOWE stated, as regards Dr. Peacock's case, that the disease was acute cancer, which had infiltrated the organs; he could not say that they had been totally disorganized.

Mr. HUTCHINSON referred to the fact that, in all the cases in which hitherto the capsules had been found destroyed without any change in the colour of the skin, the disease had been of recent origin. Bronzing of the skin was a pigmentary change, and of very slow production, and ought not to be expected, unless the organs had been wholly destroyed for some months before the patient's death. He gave no credence to the Naples case, believing that the capsules had been overlooked in the examination, as they were organs not always easy to find; and he had known of several similar mistakes being made. He thought that all the evidence yet collected tended to show that the capsules were vital organs, although death did not follow until a more or less prolonged interval after their disorganisation. In the case of the cat, he wished to ask Dr. Harley whether he felt quite certain that the organs removed were really the capsules, since they looked to him quite as much like lymphatic glands.

Dr. HARLEY expressed astonishment at Mr. Hutchinson's incredulity. He had no doubt whatever as to the organs shown being supra-renal capsules, and thought that they were not at all difficult of identification. With regard to the Naples case, a most careful search for the organs had been made by men fully alive to the importance of the question, and he thought their observations ought to be credited.

Mr. CHALK showed casts and a sketch from a case of

ENLARGED TONGUE AND PARTIAL DISLOCATION OF THE JAW.

The patient, a young woman, had suffered from enlargement of the tongue, consequent on a fall and severe bite of that organ at the age of seven. The chief interest of the case was in the fact of the partial dislocation of the lower jaw, which had been caused by the hypertrophy which had ensued.

Mr. ATHOL JOHNSON showed a specimen of
FATTY TUMOUR FROM THE SACRUM OF A CHILD.
The infant from whom it had been removed was aged ten

months, and the tumour had been noticed soon after birth. It was the size of a small egg, and no doubt was felt as to its diagnosis. In the operation it was found to be a lobulated firm fatty tumour, surrounded by a thick layer of subcutaneous fat. Its attachments were very deep, and on further dissection it was discovered that the laminae of the sacrum were deficient, and that the tumour was adherent to the theca of the cord. It was separated without much difficulty, and the theca exposed, but not injured. The pulsation of the spinal fluid was very distinctly seen, confirming the observation of Majendie on this point. The patient recovered well, and had no spinal symptoms whatever. Mr. Johnson adverted to the rarity of fatty tumours in infants, and to the interesting circumstance of its communicating with the interior of the spinal canal.

Mr. BROOKE showed a specimen of

SLOUGHING OF THE BLADDER.

The patient, who was the subject of a close congenital phymosis, had sunk from exhaustion after extravasation of urine. The perinaeum had been freely incised. A false passage connected the rectum and bladder. There was sloughing about the neck of the bladder and of a tract of urethra which included the stricture. The kidneys were disorganized and suppurating.

Mr. ROBINSON showed a preparation exhibiting a

PERFORATING ULCER OF THE STOMACH.

A man, aged 53, had died 16 hours after the sudden commencement of symptoms of extravasation of the contents of the stomach into the abdomen. He had enjoyed good health previously, with the exception that he could not bear deep pressure on the epigastrium, and that some months before he had had an attack of hæmatemesis. The ulcer was found near the pylorus, and it had effected perforation of all the coats. It had no appearance of cancer.

Dr. BRINTON had had an opportunity of examining the specimen, and quite coincided in Mr. Robinson's description of it. The ulcer appeared to have cicatrised through a large part of its extent.

Dr. BRISTOWE showed a specimen of

CANCER OF THE ŒSOPHAGUS, FATAL BY HÆMORRHAGE FROM ONE OF THE INTERCOSTAL ARTERIES.

A married woman, 32 years of age, was admitted into St. Thomas's, on the 20th of January. About a year ago she first noticed soreness on swallowing, in the mid-sternal region. This continued in much the same degree for about nine months. During the last three months, however, the soreness and pain and the difficulty of swallowing have rapidly increased, and her health has given way. On admission she had all the symptoms of stricture of the œsophagus, and the symptoms for the first fortnight of her stay in the Hospital continued to increase in severity. On the 6th of February she vomited suddenly about a pint of blood, and soon became very much collapsed. There was no return of the hæmatemesis, and she sunk and died on the 8th.

At the post-mortem examination, a large cancerous ulcer was found at the upper part of the lower third of the œsophagus; the surrounding parts were much thickened, and the exterior of the mass was moulded on the aorta and spine, without however involving either. The surface of the ulcer looked sloughy, and here and there altered blood adhered to it. The second of the intercostal arteries, springing from the aorta on the right side, was found to open directly into the ulcer, at about a quarter of an inch from its origin. The stomach was filled by a large coagulum, and all the intestines contained dark-coloured altered blood. One of the supra-renal capsules was destroyed by chronic disease; the other was healthy. No other disease was found.

Dr. MARKHAM showed preparations of
DISEASE OF THE AORTA.—ANEURISMS AT THE AORTIC SINUSES.—CLOT IN THE ARTERIA IN-NOMINATA AND LEFT MIDDLE CEREBRAL ARTERY.

A female, aged 50, was suddenly seized with paralysis of the right side, in St. Mary's Hospital, and died about sixty hours afterwards. She had long suffered from cough, palpitations, and constriction of the chest; also latterly from faintness and giddiness on exertion, and difficulty of breathing. She walked about, and was quite sensible up to a short time

before the seizure. The pulse at the right wrist was not perceptible, nor was any pulse to be felt in the arteries on the right side of the head and neck. The pupils were firmly contracted and immovable; the paralysis of the right side complete. A diastolic aortic murmur was audible over the sternum. It was conjectured that a clot of fibrin had suddenly arrested the circulation in some of the cerebral arteries.

Post-mortem Examination.—The pericardial surfaces were firmly adherent by old and organized attachments. The heart was slightly hypertrophied. The aortic valves were defective. The aortic arch was dilated, and its internal surface much diseased. Three small aneurisms were found opening into the aortic sinuses; one of these had caused compression of the descending cava, which in consequence would not admit the little finger. The arteria innominata was blocked up for a quarter of an inch by a firm coagulum, which extended up the right carotid. The opening of the left carotid at the aorta was contracted to one-fourth its natural size by fibroid exudation into its coats. The brain was congested; the left carotid artery, where it leaves the sella turcica and passes to the brain, was completely blocked up by a firm coagulum, which extended far into the middle cerebral artery; the portion of the brain to which this artery leads was in a very soft pulpy state. The other vessels of the brain were to the naked eye healthy in appearance.

When were the arteria innominata and left internal carotid artery blocked up? It is probable that the arteria innominata had been closed up for several days before the paralysis occurred; because the clot was firm, hard, and in parts quite decolourized, and because no pulse was felt at the right wrist at the time that the woman was still sensible and able to walk. The paralysis must be attributed to the sudden blocking up of the left internal carotid; and the completeness of the paralysis and the rapidity of the death ensuing to the circumstance, that as the innominata was blocked up, there could be no collateral vessels to carry on the cerebral circulation. The clot in the cerebral artery was also to appearance of a more recent date than that in the innominata. Under the circumstances, the cerebral circulation must have been carried on for sixty hours solely by the left vertebral artery.

The cause of the clots may be attributed to the possible escape of fibrinous particles from some one of the aneurismal openings. As no deviations from their healthy conditions could be seen in the arteries themselves, it is not easy to understand how they could have been a local cause provoking coagulation of the fibrin. Perhaps the defective and retarded circulation through the head and neck, resulting from the deficiency of the aortic valves and the compression of the descending cava, may have played a part in the coagulation.

The softening of the brain was evidently secondary to the clot-formation. There were no fibrinous fringes or beads around the heart's valves.

TUESDAY, March 3.

Dr. WATSON, President, in the Chair.

Dr. BRINTON read a report by Dr. West and himself, on THE FIBROUS TUMOUR OF THE UTERUS, exhibited by Mr. Nunn, and already reported on by Dr. Bristowe and Mr. Hutchinson. This report confirmed that by the latter gentlemen. The disappearance of the uterus from the cervix upwards, the coincidence of an ordinary uterine fibrous tumour, and the structure and arrangement of the mass in question appeared to Dr. West and Dr. Brinton decisive of its uterine nature and origin. The absence of one ovary, however, they could not explain, save by the conjecture that, if present, it had been involved in the mass. Dr. Brinton, indeed, thought he could trace a tube, ending in a fibrous sac with fluid contents, as the possible representative of the missing ovary.

Mr. HUTCHINSON showed a sketch from the microscope of the structure of the tumour, which, he stated, was most undoubted uterine muscular tissue.

Mr. NUNN mentioned that Dr. Engel, of Prague, in speaking of this case, stated that he had never seen an uterine tumour thus ossified.

Dr. BRINTON reminded the Society that Mr. Hutchinson's research had settled this part of the question, by discovering such a tumour in the museum of St. Bartholomew's Hospital. Speaking only from vague recollection, it was his (Dr. Brinton's) belief that there were various instances of this mode of

ossification in these tumours on record. [Dr. Brinton has since informed us that Meckel ("Pathologische Anatomie," Leipsie, 1816, vol. ii. p. 244) expressly states his experience to be, that the ossification of such tumours oftenest begins at the periphery; and mentions one or two instances of this kind, one a tumour of a walnut size, with an ossified shell of a line in thickness, and another of four inches diameter, with a shell of brownish-yellow bone, one to two lines in thickness.]

Dr. PEACOCK exhibited

CRETACEOUS MASSES EXPECTORATED BY A PERSON IN GOOD HEALTH.

They had been expectorated by a female, 35 years of age, who was at the time in good health. She stated that four years before she had a cough for three or four days, when she brought up a small piece of stone, and the cough entirely left her, and she had been well ever since. On the 26th of June last, she brought six pieces of cretaceous matter, which she stated she had coughed up, generally at night, within two or three days, and she complained of a feeling in the throat, as if another piece were there. On the 3rd of July she brought three other pieces. The masses were brought up with a few streaks of blood, but without any mucus. The cough was of a hard, dry character, and her voice was a little husky. She stated that she was then three months pregnant, and was, as she usually became under such circumstances, somewhat thinner than ordinary, but was otherwise in good health. She had never had any serious illness, except scarlatina, in early life, but had occasionally lost her voice for a short time. She was of a fair complexion. Dr. Peacock did not see her after the 17th of July, when she was quite well, and he had reason to believe that she had continued so. The pieces exhibited were of irregular shape—the largest about the size of a pea, the smallest about one-fourth that size. Dr. Peacock remarked that he had frequently had small cretaceous masses brought to him by patients who had expectorated them. In ordinary cases those patients were phthisical, and gave histories of previous phthisical symptoms, which had been more or less completely arrested, and then recurred. In the present instance, the patient was in good health, and, after careful examination, he had no reason to believe that the lungs were at all diseased. He thought it most probable that the masses exhibited had escaped from bronchial glands which had been tuberculous in early life.

Mr. NUNN exhibited a specimen of

ELONGATED OVARY.

It had been removed from the body of a girl, aged 19, who had died in the Middlesex Hospital. There had been no symptoms of uterine derangement. The left ovary was much elongated, and accompanying that condition was a lengthening of the cervix uteri, which measured nearly an inch and half, being more than half the length of the entire organ. Mr. Nunn thought that both these peculiarities were probably congenital.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

FEBRUARY 24, 1857.

Mr. CÆSAR HAWKINS, President, in the Chair.

(Continued from page 249.)

Mr. SYME presented a paper

ON A NEW METHOD OF OPERATING FOR IMPERMEABLE URETHRA.

In a former communication upon the remedy of stricture by external incision, the author endeavoured to show that impermeability was not consistent with the nature of stricture, and that whenever the urine could pass through the urethra an instrument might be made to do so; not perhaps at once and with ease, but always through time and proper management. Though thus certainly permeable while merely contracted, the canal was undoubtedly liable to complete obstruction in consequence of wounds, and also of sloughing, when it had been found to constitute a very troublesome subject of treatment by the operation hitherto employed—viz. cutting upon the point of a catheter passed down to the seat of obstruction, so as to clear a way for its introduction into the bladder—a process rendered difficult by the thickness and condensation of the textures con-

cerned, and also dangerous as well as uncertain by the risk of not cutting exactly in the proper course of the urethra. Two cases of this kind—one from a provincial town in Scotland, and another from St. John's, New Brunswick, in both of which not a drop of urine passed through the urethra for many months, the urethra being completely obstructed to the introduction of instruments—having lately come under the author's care at the same time, led him to reconsider the subject, and devise the following plan instead of the one usually employed, which for the reasons just mentioned he was unwilling to adopt. An instrument like the common lithotomy staff, with a groove on its concave instead of the convex side, being introduced through the fistulous opening of the perinæum, and confided to an assistant, the guide director employed for the division of strictures by external incision might be passed down to the seat of obstruction, and while the staff was supported by pressure upon the perinæum to thrust through the opposing substance in the course which it ought to take if the canal were free, enter the groove, and so pass into the bladder, when the state of matters would be similar to that of a stricture requiring division after having the director passed through it, so that the operation might be completed in the same way as upon such an occasion. This procedure was executed in both of the cases, without any difficulty in one, and without more in the other than might have been expected from the extreme degree of injury which the patient had sustained by falling twenty feet, fracturing the pubis, having the bladder punctured, &c. &c. The first patient was dismissed from the hospital perfectly well at the end of seven weeks after the operation; the second, passing urine in a full stream, but in general only by drops through the perinæum, appears also to have the prospect of complete recovery at no distant date. While quite aware that the formation of a new urethra is much less promising in its result than the enlargement of an old one, the author expressed his hope that the method which he had proposed would facilitate the procedure, and lessen the risk of its bad consequences.

Mr. COULSON thought there were many cases in which the plan proposed by Mr. Syme would not be applicable. There might be a great portion of the urethra obliterated anterior to the perineal opening, in which case the mode of propelling the small director would not apply; or the operator might not always be able to get the staff from the perineal opening into the bladder, on account of the tortuous course it would have to take. He had seen many such cases, in which he considered these difficulties would be almost insuperable.

Mr. BENJAMIN TRAVERS referred to the fracture of the pubis, mentioned as occurring in the second case, and said it was a very serious and often fatal complication. It co-existed with extensive laceration in the neck of the bladder. He suggested that the paralysis of the rectum was explained by the circumstance of the fracture. The difficulty connected with Mr. Syme's operation, would, he conceived, in many cases, be to hit the posterior opening, and push any kind of instrument thence into the bladder. He did not see the advantage over the old operation practised for so many years past at St. Thomas's Hospital.

Mr. HUTCHINSON said he had hoped, from the title of the paper, and the reputation of the author, to have heard a description of some expeditious plan of getting through those strictures ordinarily termed impassable, and without any perineal fistula. When a perineal fistula existed the case was a comparatively easy one. The operator had but to pass a catheter by the fistula into the bladder, retain it there as a guide in the subsequent part of the operation, and then cutting on the point of a full-sized instrument passed by the penis as far as the obliterated tract, there was no difficulty whatever in making an incision between the two portions of the urethra. The real difficulty occurred in cases in which no direct fistula from the perinæum existed, and the posterior tract of urethra could not be found. Then again, in cases of obliteration, one never knew the length of the obliterated tract, and often the induration was of extreme density. He thought there was some objection to the use of force with so small an instrument as the grooved director recommended by Mr. Syme, from its liability to bend, and to pass out of the proper direction; as he had once found it do in the course of his own experience.

The PRESIDENT asked Mr. Syme if he did not think that cases of lacerated urethra, with sloughing, did not do better, after operation, than where incision was made in cases of stricture.

Mr. S. SMITH said Mr. Syme ought not to be made answer-

able for the London instruments bearing his name. The instrument which he himself had exhibited, ought never to be bent by any surgeon.

Mr. SYME, having been requested to do so, explained more particularly the operation which he had proposed; and, in reply to Mr. Coulson's objection, that it would be rendered difficult by the tortuous direction of the fistula, stated that the passage was always perfectly direct, and also wide, unless perhaps just at the orifice, since the cause of true obliteration, for which alone the operation was intended, resulted from either sloughing or wounds, and not from the gradual extension of purulent matter, as in the ordinary cases of perineal fistula, which always admitted of remedy, either by dilating or dividing the stricture that gives rise to them. As to the opinion expressed by Mr. Hutchinson, that the operation in question would not be applicable to strictures so tight and tough as to bend metallic instruments employed for their dilatation, Mr. Syme again explained that the procedure which he had proposed was intended for the remedy, not of *stricture*, but of *obliteration*, and that he believed the former condition would never be found to require the old expedient of cutting upon the point of a catheter, if the introduction of bougies were perseveringly attempted with skill and care, and especially with such gentleness as must entirely preclude the risk of bending a metallic instrument.

The Society then adjourned.

QUESTIONS AT THE FIRST COMPETITIVE EXAMINATION FOR ARMY ASSISTANT SURGEONS.

MIDWIFERY, BOTANY, AND ZOOLOGY.

1. Should flooding occur during pregnancy, what would you do? and if the means you employ have not the desired effect, what would be your next step? and in the event of that also failing, what would you then try?

2. Describe what successively occurs in the human female between the time of impregnation and the final expulsion of the fœtus.

3. How long would you permit the placenta to remain after delivery? State what may retard or prevent its expulsion; and how you would proceed in each description of case.

4. Give the symptoms of puerperal fever; the usual time of its invasion; the treatment you would adopt; and the morbid appearances usually discovered when the disease proves fatal.

5. Describe the system of classification of Linnæus, and that of Jussieu. To what parts did Linnæus resort for his classes and orders? What parts were employed by Jussieu? Give an example of the Cryptogamia Lin., and of the Acotyledones and Cotyledones of Jussieu.

6. State the mode of growth of an exogenous and of an endogenous plant; and instance one of each description.

7. Enumerate the parts which compose the flower of *Solanum tuberosum*, and the uses and functions of each part; how the pollen escapes, and how it is conveyed to its destination.

8. What are the classes of the animal kingdom proposed by Cuvier? and what are the orders in which he arranges the vertebrate animals?

9. How would you distinguish a poisonous from a non-poisonous snake?—State in what respects the teeth of the one differ from those of the other.

10. What is understood by a warm-blooded, and what by a cold-blooded animal? Give an example of each, and state the form of the blood-globules in those you instance; state also how impregnation is effected in each. What is implied by viviparous, oviparous, and ovoviviparous, and give an example of each?

SURGERY.

1. A musket-ball has passed through the shoulder, fracturing the head of the humerus—What would you do?

2. On cutting a flap to excise the head of the bone in the above case, the neck of scapula and glenoid cavity are found to be badly fractured, and a longitudinal fracture is found to extend down the shaft of the humerus below the point to which your incisions reach, and apparently going considerably further still—What would you do?

3. A man's foot has been frostbitten, and is, in consequence

dead from the toes upwards, as far as half way up the metatarsal bones—How would you treat it?

4. A man has been severely wounded by a fragment of shell which has penetrated deeply into the buttock, and he shows you a large mass of iron which has been extracted. Two days afterwards he is brought to you from the front; you dress the wound lightly; and in two days' time you find him suffering from trismus—What would you expect to be the nature of the wound, and what would you do?

5. You have performed the operation of lithotomy in the case of an old man, and, several hours afterwards, hæmorrhage to a considerable extent sets in; the blood is dark-coloured—What the probable source of bleeding, and what would you do?

6. A musket-ball enters close to the trochanter major, fracturing the femur, and splintering it downwards for a couple of inches—What steps would you adopt? Also, suppose another case, where the bullet, after inflicting the above injury, had lacerated the femoral vessels on the anterior part of the thigh—What course would you follow?

7. In cases where the femur is broken by a musket-ball within four inches of the trochanter major, or lower down, and when the laceration of the integuments is not great—How would you treat the case?

8. Suppose the abdomen were wounded, and that unstrangulated omentum protruded—What would you do? and, further, suppose a large strangulated mass were protruded, how would you act?

9. How would you perform excision of the elbow-joint? What nerve would you carefully protect from injury during the operation?

10. How would you perform the operation of paracentesis thoracis? and what would you strive most to avoid in performing the operation?

ANATOMY.

1. Enumerate the Bones of the Tarsus and Carpus, stating their position and relation to each other.

2. Give the Anatomy of the Shoulder Joint.

3. What are the Contents of the Lateral Ventricles of the Brain?

4. What are the Characteristics of a Cervical, Dorsal, and Lumbar Vertebra?

5. What Vessels are given off from the Abdominal Aorta?

6. In the Circular Amputation of the lower third of the Thigh, what parts are cut through?

7. What are the Branches of the External Carotid Artery, and to what parts are they distributed?

8. What are the Ligaments of the Knee and Ankle Joints?

9. Give the symptoms and treatment of poisoning by Arsenic; stating also the Pathological appearances of the affected structures, and the tests for discovering the presence of Arsenious Acid.

10. Name the Antidotes for Oxalic Acid, Corrosive Sublimate, and Nitrate of Silver.

GENERAL AND SPECIAL PATHOLOGY, AND THE PRACTICE OF MEDICINE.

1. In the course of what diseases is ulceration of the gastrointestinal mucous membrane apt to occur; and what symptoms and signs would lead you to infer the supervention of that lesion? Detail the various positions in which it is found, the extent to which it generally proceeds, and the successive steps of that process.

2. Excluding hæmoptysis proper, describe the various kind of matter expectorated from the lungs and air passages,—specifying the diseased conditions with which they are severally associated, their diagnostic value, and the aid to their examination furnished by the microscope.

3. Describe the mode of production and the diagnostic value of the principal auscultatory signs.

4. Describe the treatment of hæmoptysis under the various circumstances of its occurrence; and, in relation to these, give the prognosis you would form in the several cases.

5. Detail the symptoms, causes, and treatment of delirium tremens, as this disease is generally met with; and specify what peculiarity of symptoms is presented, and what modification of treatment is demanded in the disease when occurring at the close of a severe debauch in a young and robust subject.

6. Describe the etiology of Scorbutus; and specify the points of resemblance, and also the differences between it and Purpura,—as well as in the treatment of the two diseases.

7. What are the signs and symptoms; and the causes, proximate and remote, of Abscess of the Liver? Detail the course you would pursue when this becomes the prominent object of treatment.

8. Describe the treatment of a severe case of Intermittent Fever, appropriate for its several stages; and enumerate the various remedial agents which may be employed in that disease, specifying those under which obstinate cases have at length yielded.

9. What are the different forms of mental derangement usually met with in practice, and what are the leading features of each?

10. Suppose you were ordered to embark for Ceylon, in Medical charge of a numerous draft of soldiers, with the usual quota of women and children, what general hygienic means would you recommend to be adopted for the voyage? and, in the event of an outbreak on board ship of malignant Cholera, or of Small-pox, what particular measures, dietetic, regimental and medicinal, would you endeavour to carry out?

PARLIAMENTARY INTELLIGENCE.

HOUSE OF LORDS.—MONDAY, March 9.

The Public Health Amendment (1857) Bill received the Royal Assent.

HOUSE OF COMMONS.—MONDAY, March 9.

MEDICAL REFORM BILL.—Mr. HEADLAM, by leave, withdrew this Bill.

In Committee of Supply £20,000 was voted for Naval Medical stores.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 27th ult. :—

JOSEPH ORPE BROOKHOUSE, Brighton.

RICARDO COPE, Spark Hill, Birmingham.

W. J. DAWSON HUTCHINSON, Barnard Castle, Durham.

WILLIAM LOUIS LE SAGE, Ramsbury, Wiltshire.

WILLIAM MACCORMAC, Belfast.

JOHN JAMES MACGREGOR, Melbourne, Australia.

CHARLES JAMES MILLER, Brighton.

CHARLES PATERSON, Tarland, Aberdeenshire.

C. L. HENDERSON PEMBERTON, Southsea, Hants.

PIO RENGIFO, New Granada.

BRAITHWAITE ROGERS, Whitehaven, Cumberland.

FREDERICK HENRY SMITH, Greenwich.

SAMUEL SMITH, Hudson's Bay Company.

KENNETH BRUCE STUART, Calcutta.

JOSEPH WILLIAMS, Westerleigh, near Bristol.

At the same meeting of the Court, JOHN HUDSON, of H.M.S. Rhadamanthus, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College, his diploma bearing date April 25th, 1853.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, March 5.

JOHN AUGUSTINE YOUNG, Maidstone.

HENRY WILLIAM JACKSON, Louth, Lincoln.

CHARLES FREDERICK GEORGE, Kirtton in Lindsey.

FRANCIS JOHN GRIFFITHS, Bilston, Stafford.

FREDERICK AUGUSTUS PALMER, Landport, Portsmouth.

EDWARD ASHTON, Wainfleet, Lincolnshire.

JOSEPH READ, Southam, Cheltenham.

RICHARD BIRKETT BROOKS, Sleaford, Lincolnshire.

DEATHS.

DR. KANE.—We learn by the last American mail that Dr. Kane, the gallant, enterprising Arctic explorer, died lately at the Havannas. He was born at Philadelphia in 1822; took his degree of Doctor of Medicine at the University of Pennsylvania in 1843, and soon after went to China, as surgeon to the American embassy. After exploring the Philippines, traversing India, visiting Ceylon and Egypt, suffering from the plague, he returned to America. He then

visited the west coast of Africa, suffered from the remittent fever of the country. He then served in the Mexican war, and afterwards in the first American expedition in search of Franklin. The history of his last Arctic expedition, and his rescue on the coast of Greenland, will be fresh in the recollection of our readers. His voyage to England, and his last illness, followed rapidly on each other, and an eventful life was closed at the early age of 35.

APPOINTMENT.

The Lords Commissioners of the Admiralty have been pleased to appoint Mr. R. O. Gorham to be the Surgeon and Agent for the care of the sick and wounded seamen and marines of the Royal Navy at Aldeburgh, Suffolk, 2nd March, 1857.

GERMAN HOSPITAL.—On Wednesday evening the 12th anniversary festival of this charity was celebrated at the London Tavern. His Royal Highness the Duke of Cambridge presided, and about 160 gentlemen sat down. The working expenses of the Hospital during the past year were only £2850, and the receipts from all sources during the same period were £3617, of which sum £1999 19s. 11d. was collected at the anniversary dinner, and £977 from annual subscriptions. The debt of £1500 had been reduced to £1000, and an addition of £1000 had been made to the funded property, which now amounted to £3355. 913 in-patients had been in the Hospital during the past year. The out-patients for the same period were 11,006, of which number more than 4000 were natives of this country. Since the opening of the Hospital the in-patients amounted to 6697, and the out-patients to 52,890, making a grand total of 59,587 who had sought the benefit of its relief. A subscription of nearly £1900 was realized at the dinner.

LONDON FEVER HOSPITAL.—The office of Resident Medical Officer is now vacant.

DURHAM UNIVERSITY INTELLIGENCE.—At a Convocation holden March 3, the following regulations were passed for the four Medical Scholarships, founded June 17, 1856:—In ordinary cases such Medical Scholarships as shall have become vacant, shall be filled up at the beginning of Michaelmas Term in each year. The candidates for the Medical Scholarships shall be those persons who have not kept more than one term by residence in the University, or those who are desirous of being admitted as medical students. Each candidate must produce to the Warden satisfactory testimonials of character. The subjects of examination shall be the Latin language, some portion of English History, Arithmetic, and English Composition. The Examiners shall report to the Warden and Senate for election the students who shall pass the best examination. The books and particular portions of English History shall be fixed by the Warden and Senate three months at least before the examination. The Medical Scholarships shall be tenable for three years by medical students who reside and pursue their studies either at Durham or at Newcastle as medical students, provided that, at the end of their first year's residence at Durham, they produce satisfactory testimonials of character, and pass the public examination in a creditable manner. Thomas Thompson Pyle, of Bishop Cosin's Hall, Student in Medicine, was admitted to be a Licentiate in Medicine.

DINNER TO DR. MCKINNON.—A Dinner was given at Calcutta, the 7th ult., by the Medical Service, to Dr. K. McKinnon on his retirement. The party was very crowded, and the meeting altogether a very successful one. Dr. Alexander Grant was Chairman, and Dr. Edward Goodeve, Croupier. After the health of the Queen and the Governor-General, the Chairman gave the toast of the evening. He said, "As a Medical officer Dr. McKinnon has always had the honour and interests of the department at heart; he has ever been foremost in advocating improvements; and I regret that he will quit the shores of India before he has seen the dawning of that good time which I hope is coming for the Medical service. As an author, our friend is best known by his admirable Treatise on Public Health, and the Diseases of Bengal and the North-Western Provinces. But throughout his whole service he has been a frequent contributor to the Medical periodical literature of India, and some of his recent contributions to the Annals of Medicine are of high value, as the results of his matured experience. He returns to his native

country undecorated and without fortune; but he returns with that which may be the consolation and the proud reward of all of us,—the consciousness of having done his duty." Dr. McKinnon returned thanks. The Croupier next gave the health of Lord Dalhousie, as the friend of the Medical service, to whose statesmanlike and liberal views it is indebted for recommending to the Home Government considerable modification in its organization, which, if carried out, will be attended with the most beneficial results, and will prove most acceptable to the service; for among other important changes it will, in point of rank and honours, place them on a footing of equality with their military brethren. Several toasts followed.

DEATHS FROM SNAKEBITES IN INDIA.—The number of deaths arising from snakebites in some districts of the Bombay Presidency is considerable. In the Dharwar Zillah, for instance, no less than 16 deaths are reported to have occurred within the last four months from this cause. It appears that more deaths are occasioned by snakebites than by tigers. The people, encouraged by rewards offered, are occupying themselves most actively in destroying these reptiles. Each day nearly 300 dead snakes are brought in. Mr. Bettington saw an immense number of every description; the most common of all is one called the "foorsa." The civil surgeon of Rutnagherry knows no remedy for the poison of this deadly reptile. Ammonia and other stimulants, if applied in time, are effective antidotes to the poison of the cobra and some other snakes, but are of no avail against the poison of the foorsa.

BIRTHS, DEATHS, AND MARRIAGES IN SCOTLAND DURING JANUARY 1857.—During the month there were registered in the eight principal towns of Scotland 2901 births, of which 1513 were males, and 1388 females; 2211 deaths, of which 1093 were males, and 1118 females; and 865 marriages. Allowing for increase of population, this would give at the rate of one birth annually in every 24, one death in every 32, and one marriage in every 83 persons. The proportion of births, deaths, and marriages is therefore considerably higher than those of the corresponding month of 1856. Of the 2211 deaths, 1086, or 49 per cent., were under five years of age. The proportion of deaths under five years of age, in the different towns, was, in Aberdeen, 29 per cent.; in Edinburgh, 38; in Perth and Greenock, 39; in Leith, 43; in Paisley, 48; in Dundee, 50, and in Glasgow, 55. 636 deaths from the zymotic class of diseases were registered during the month, thus constituting 28 per cent. of the total mortality. The presence of epidemics in some of the towns caused the proportion to vary considerably.

NEW WAY OF DISPOSING OF PATENT MEDICINES.—A few weeks ago, London was placarded with huge bills announcing the operations of a Metropolitan Benevolent Association; and being tempted to read one of these documents, we discovered, to our disgust, that the Association (limited) was formed for the purpose of selling a remedy for piles at half-price. A Company, also limited, has been talked of for manufacturing and selling Warburg's Tincture. The prospectus of this latter Company rather ominously states that it is under the special patronage of three illustrious individuals, all of whom are dead. We believe Dr. Warburg would be a richer man if he were to make known the nature of his new febrifuge (supposing that it is new), and trust to the ordinary sources of professional income.

MORTALITY NOTABILIA.—The deaths registered in London, which in the first week of February rose to 1368, have continuously decreased since that time, and in the week that ended last Saturday were 1175. In the ten years 1847-56 the average number of deaths in the weeks corresponding with last week was 1160. This average raised proportionally to increase of population becomes 1276; thus the deaths last week were less by 100 than the average. The mortality from diseases of the zymotic order was last week unusually low, for the deaths referred to these did not exceed 171, whilst the corrected average for corresponding weeks is 244. The deaths caused by diseases of the organs of respiration, which in the previous week were 304, declined last week to 262.

BIRTHS.—The births of 970 boys and 888 girls, 1858 children, were registered. Average 1649.

METEOROLOGY.—The mean height of the barometer in the week was 30.122 in. The mean reading of this instrument was above 30 in. daily during the last ten days of February, and the first five of the present month.

POOR-LAW MEDICAL REFORM ASSOCIATION.

ON Thursday evening last an aggregate meeting of Medical Students, convened by the above Association, was held in St. Martin's Hall. Mr. A. H. Layard occupied the chair.

In opening the proceedings the CHAIRMAN said he at first felt some diffidence in undertaking the advocacy of a movement with which, heretofore, he had been but little acquainted; but, after looking over the papers which had been placed in his hands, he found the question was one very easily understood and mastered. What was the state of the case? There was a Profession which ministered to the wants of the community, a Profession, consequently, than which there was not a nobler, or more useful, or more deserving the gratitude and esteem of those among whom its duties were exercised. (Hear, hear.) In order to obtain the privilege of exercising that Profession, young men were required to go through very severe studies, occupying a considerable portion of the most valuable part of their lives, and a large outlay of money. Having passed their examinations, and paid their fees, they were then thrown on the country to look after the health, and consequently the happiness, of the whole community. Very many of the members of the Profession were engaged in administering to the poorer classes, the substratum on which all other classes of society must rest. In their work of usefulness they had many privations to endure; they had to a great extent to sacrifice domestic enjoyment, and were called upon in all seasons and at all hours of the day and night to hurry to those who might be in need of their aid, giving up everything for the preservation of the health and lives of those poor persons intrusted to their care. They had also to provide themselves with instruments, frequently with costly drugs, and sometimes to do that which was often considered a sign of respectability—keep a horse and gig, being all the time at the beck and call of those under whose orders they were placed, from twelve o'clock one night to twelve o'clock the next. Of course it would be at once naturally assumed that gentlemen thus occupied would receive ample remuneration for their services; but, according to a return which he held in his hand, it appeared that on an average they did not receive more than 3s. a case. (Cries of "Shame.") It was extraordinary that such a state of things existed. It was a trite saying that the health of the community was the wealth of the community; the question, therefore, was not simply a professional, but an economical one, in which every member of society was interested. (Cheers.) It appeared that the average value of that which was supplied out of the pockets of the Medical men in such cases was almost equal to the sum received by them for attendance; hence it was evident that a man must either neglect those who were committed to his care, or be out of pocket in the discharge of his duty; either of which alternatives was disgraceful to the community that suffered it. The matter had been investigated by a committee of the House of Commons; and, as was frequently the case, when such things were technically called "sent up stairs," it appeared to have been unceremoniously kicked down stairs again. (Laughter.) Much useful information was taken before the committee, to some of which public attention ought to be called. A clergyman, the Rev. Mr. Howman, who had ample opportunities of observation, stated that the present system worked badly for all parties, the guardians, the Medical officers, and the poor, being alike discontented. The question, as he had said, was an economic one; because if, by the smallness of the pay, Medical men were compelled to neglect those who were committed to their care, what was the result? That the lives of many poor men were endangered, and if they died their families became a burden on the parish, and an expense to the ratepayer. The statements that had been made on the subject would be perfectly incredible if they had not been well substantiated. A gentleman who had taken great interest in the movement, and had conferred a great benefit upon the Profession—Dr. Griffin—(cheers)—had ably brought the matter before the public. He had given a summary of the duties performed by himself during the half-year ending September 29, from which it appeared that during that period he had 353 out-patients, paid 1507 visits at patients' houses, received 481 persons in his surgery; distributed an amount of

physic which to him (the Chairman) seemed almost enough to poison the entire population of the country (laughter); viz.—902 mixtures, 277 boxes of pills, 44 liniments, 110 lotions, 101 boxes of ointment, 91 packets of powders, 23 blisters, 7 draughts, 7 plasters; besides three confinements, one amputation, one removal of a large tumour, extracting teeth, and the like; for all of which drugs and attendances he received the munificent sum of £17 10s. (Hisses.) It was evident that Dr. Griffin must be a very unprincipled or a very honest man; and as they knew him to be the latter, he must have been a very considerable loser by his draughts, pills, and lotions. He had that day received a letter from a gentleman in a similar position, and who related his experience in a similar manner. The number of cases he had to attend had increased from 752 to 1325, and his salary had been reduced from £85 to £60. Dr. Griffin had been very much engaged in correspondence with the Circumlocution Office. First he wrote to the Board of Guardians, who told him that he must write to the Poor-law Board; the Poor-law Board referred him back to the Board of Guardians, and the Guardians sent him again to the Poor-law Board, and at last he had been informed that his case was "under consideration," which, of course, meant that it would never be considered at all. (Laughter.) Having worn out the soles of his boots in going backwards and forwards between the different Circumlocution Offices, he had addressed a pamphlet, containing a statement of the facts, to Lord Palmerston, who, of course, would never read it. The answer to all complaints had been, that where there was a demand there was a supply, and if one man would not do the work another could be obtained. This was often urged by those to whom the argument would better apply; and no doubt the gentlemen of the Poor-law Board would be greatly surprised if they were told that the business they did might be done a great deal cheaper by others, and (what could not, perhaps, be said of the Medical men) a great deal better. But the argument was worthless. The question was, were the services rendered by the Profession such as entitled them to a fair remuneration? and would any one say that 3s. a case, each case extending on an average over twenty-eight or thirty days, and involving continual attendance and a considerable outlay, was in any way equal to the services which the public had a right to ask from those who were employed under the Poor-law Guardians? A very moderate scale (5s. for each case) had been proposed, and he had no doubt the public would see that it was adopted. For himself he should be happy to further the object in or out of Parliament, being convinced that it was one in which the interests of the entire community were concerned. (Cheers.)

Mr. FARR, one of the Honorary Secretaries, read a brief report detailing the efforts that have been made to procure redress of the grievance in question since the meeting of the Profession in the Hanover-square Rooms in 1846.

Mr. M. MACKENZIE (London Hospital) in moving the first resolution, said the existing system of medical relief was fraught with evils that called for immediate relief. He congratulated the students upon again meeting in that hall to express their indignation at the insult cast upon the Profession, especially after the success which had followed their exertions in behalf of the Assistant-Surgeons in the Navy. The evil of which they had to complain was due to the miserable meanness and petty tyranny with which Boards of Guardians were wont to requite the valuable services of their medical officers—the remuneration in many instances not exceeding that paid to paupers for picking oakum. (Shame.) The resolution he had to move was—

"That the existing system of Poor-law Medical relief is fraught with evils which call for immediate reform."

Mr. H. G. SKINNER (Charing Cross) seconded the resolution.

Mr. C. DRYSDALE (University College) moved the second resolution—

"That the present system grievously injures the efficiency of the relief afforded, by crippling the resources, limiting the powers and lowering the standard of skill among the administrators of that relief; and that the remuneration afforded is inadequate to the labours which are demanded of them, the skill which they should possess, and the expenses incidental to their position."

Having described the evils of the present system, he pointed out what he conceived to be the remedies. These remedies

appeared to him to be twofold:—first, what Government could do; and, secondly, what Government could not do. Government had done much to encourage various branches of industry; but it had not been equally mindful of the claims of scientific men. He, therefore, proposed as the desideratum, so far as Government was concerned, that a minimum salary should be fixed for Poor-law and other Government Medical Officers, in order to raise a higher standard for applicants for such posts. He could scarcely help remarking, as they were all aware, that their Chairman was the distinguished upholder of the principle of the right man in the right place—(cheers)—that the best men could only be obtained by open competition. It was not open competition, but over competition that they had to fear. This brought him to the second remedy—that which Government could not do, but which the Profession could do for themselves by uniting in a determination not to accept a remuneration inadequate to the services they were called upon to perform.

Mr. E. HART (St. Mary's) seconded the resolution in an able speech. It was true the Profession might refuse to accept office at all, and there were many and valid reasons why they should do so, why, in fact, they should "strike." But there were many and more valid reasons why they should not. The profession of a Medical man was not like a trade or any other profession. If a man took a brief to a barrister he could refuse it if he thought that the fee was not equal to his deserts. But a Medical man could not act thus. It was not a customer that came to his door; it was pain and suffering, which he felt it was his duty to mitigate, although he knew that he should receive no remuneration for his care and attention. The Profession dare not neglect their duty to alleviate human suffering, but they could and ought, while conscious of their rights, insist upon immediate redress. Public duties were public rights, and he maintained that those duties should be made worthy the acceptance of those who had to perform them.

Mr. J. G. BARFORD (St. Bartholomew) moved the third resolution:—

"That the supervision of their labours, and the arbitration of all questions affecting their interests and their reputation, are most improperly referred to unprofessional persons, for the most part ill fitted for such functions."

He thought the Profession had submitted to the yoke of oppression for several years, because they had not had the privilege to assert their rights; he, therefore, hoped that the present movement would be followed up, until Poor-law Medical officers were placed in the position which they were entitled to occupy. One thing seemed to him desirable, and that was that a distinguished member of the Profession should be connected with the Poor-law Board to superintend the department of Medical relief.

Dr. BAKEWELL (Middlesex) said he was, to some extent, fitted to second the resolution, from having himself witnessed the bad effects of submitting Professional questions to non-professional men. Until last Christmas, he had the misfortune to be a Poor-law Medical officer for some time under a Country Board of Guardians. They were, probably, aware what Country Boards of Guardians were; farmers, very large persons with very small heads—(laughter)—exceedingly jolly fellows, who would treat you with unlimited cigars and brandy-water if you went to their houses, but horrid screws when they got upon Boards. He would give an instance of the way in which they acted. He was appointed Medical officer to the workhouse for the paltry salary of £30 a year, for which he attended 112 patients, supplied them with medicines, and performed operations. The house-diet consisted of ten ounces of bacon in the week, with soup, skilly, cheese, and bread, but no beer. After he had been there a fortnight, he was appealed to by several women with infants at the breast, who were suffering from hyper-lactation in consequence of insufficient diet. In his simplicity he put them on a meat diet, and to one of them he actually had the audacity to give beer. In a few weeks he received a note from the Chairman, asking whether he was not aware that one of the women was unmarried, and that her child was a bastard; and did he think he was doing right in encouraging immorality? (Laughter.) Some correspondence passed upon the subject, and, as he would not acknowledge the right of the Board to dictate to him, a complaint was made to the Poor-law Board. He was represented as an insubordinate Officer, who was actually giving a premium to

prostitution; and the end of it was, that he was requested to resign his appointment, because he gave women meat who were suffering from hyper-lactation. (Shame).

Mr. A. E. DURHAM (Guy's) moved the fourth resolution:—

"That since the grievances set forth not only affect the character and privileges of a large class of professional men, but closely touch the medical care and wellbeing of the suffering poor throughout the kingdom, they call for immediate redress, and are well deserving the attention of Parliament." Mr. Durham submitted that success depended not so much upon individual effort as upon a general movement of the Profession. The proposal to appeal for redress to Parliament was a course which he approved, and on two grounds—on the ground, as stated in the resolution, that the present system of appointing Poor-law Medical officers was inimical to the character and interests of the Profession, and also on the ground that it affected the care and well-being of the poor.

Mr. T. SMITH (Manchester) seconded the resolution.

Mr. W. P. SWAYNE (King's) moved the fifth resolution:—

"That the present Committee of Delegates, representing the Students of England, be requested to continue to act in their names, with the view of obtaining petitions, collecting funds, and taking such further steps as may seem desirable."

The resolution was seconded by Mr. J. R. HAYWARD, of Bristol.

Mr. W. M. ORD (St. Thomas's) moved the sixth resolution:

"That petitions be signed by the Students of every Medical School in England, and arrangements made for their presentation in the most fitting time and manner."

Mr. BINGLEY (York) seconded the resolution.

Mr. ROBERTS (St. George's) moved the seventh resolution:

"That this meeting desires to express its high appreciation of the valuable service rendered by Richard Griffin, Esq., in initiating a great professional movement, and offers to him the assurance of its sympathy and the promise of its aid."

Mr. H. SOULBY (of Hull) seconded the resolution.

Mr. GRIFFIN, Jun., acknowledged the compliment on behalf of his father, and in the course of his observations stated that upwards of 500 Medical officers in the kingdom had enrolled themselves members of the Poor-law Medical Reform Association, that in 1865 290 medical officers threw up their appointments in disgust; and last year, although the offices were made permanent, 249 threw them up. This fact alone, he remarked, was evidence of the wide-spread dissatisfaction which existed, and of the necessity there was for a combined and determined effort to obtain redress.

The proceedings terminated with a vote of thanks to the Chairman.

ZYMOTIC DISEASES IN LONDON IN 1856.—It is gratifying to observe that small-pox is declining before vaccination, notwithstanding the nonsense of the Michell school.—"The decline of small-pox in London may be traced through the last seven quarters. In the spring quarter of 1855 the deaths from it were 328; and thereafter the quarterly numbers were 196, 177, 194, 146, 108, having decreased almost continuously till they were only 74 in the last quarter of 1856. The annual mortality from scarlatina has also been very perceptibly less since 1851. If the deaths from this disease, as they occurred in four seasons during the last five years, be compared, it will be seen that they always rose rapidly towards the close of each year; in 1854, when scarlatina was most fatal, the deaths from it were 3439, and in the last quarter of that year 1297; in 1856 they were 1795; and in the last quarter 556, having been in each of the previous three quarters about 400. Hooping-cough differs from scarlatina in this respect, that it is almost invariably most fatal in the winter quarter, viz., January, February, March, and (in the next degree) in the spring. The deaths from hooping-cough were 2078, showing a decrease on some previous years. Measles, alone of the four epidemics mentioned, exhibits an increase; in 1855 it was fatal in 864 cases, but last year in 1445."—Registrar-General. Typhus appears to maintain its ground, and the increasing efforts made to promote sanitary improvements do not present us with a corresponding advantage in reference to this pest. The deaths from typhus in 1856 were 2645, and in the past 10 years they were for each year respectively 3184, 3569, 2479, 1923, 2346, 2164, 2649, 2669, 2332, and 2645. The deaths from cholera and diarrhoea were about the average of years in which these diseases were not epidemic.

ORIGINAL LECTURES.

A COURSE OF LECTURES
ON THE
NATURE AND TREATMENT
OF THE DISEASES OF THE EAR.

DELIVERED AT

St. Mary's Hospital Medical School.

By JOSEPH TOYNBEE, F.R.S.

Aural Surgeon to St. Mary's Hospital, Lecturer on Aural Surgery at St. Mary's Hospital Medical School, and
Consulting Aural Surgeon to the Asylum for the Deaf and Dumb.

(Reported by JAMES HINTON, Esq.)

LECTURE XI.

MEMBRANA TYMPANI.

(Concluded from page 185.)

Ulceration of the Dermoid Layer of the Membrana Tympani.

—Ulceration of the dermoid layer is not an affection of frequent occurrence; it is, however, occasionally met with, and is the result of long-continued catarrh of the dermis, or it may be produced rapidly by the application to its surface of irritating matters, or of cerumen. The symptoms of this affection are very similar to those described in the previous section; there is, however, not uncommonly a discharge of blood, and the pain is more severe.

CASES.

Ulceration of the Dermoid Layer from the pressure of Cerumen.

—Mrs. G., aged 40, saw me on May 26, 1855.

History.—Fourteen days previously she had a singing in the left ear, which came on suddenly after fatigue, and has remained until the present time; it is accompanied at times by a sensation of confusion in the head.

Upon examination, the meatus was found to be full of cerumen; the watch was heard only when in contact with the ear. Upon removing the cerumen, by means of a syringe and warm water, the outer surface of the membrana tympani was observed to be red. At its anterior part there was a small surface, about three quarters of a line in diameter, where the dermis had been wholly destroyed by ulceration; there was a small depression, at the bottom of which the membrane was red. The hearing distance was reduced to eight inches. No applications were made, and the ulcer healed in a few days.

Ulceration of the Dermoid Layer: Fibrous Layers exposed.—J. A., Esq., aged 35, was sent to me on March 26, 1850, by Mr. Mossop of Whitehaven.

History.—Twenty years since had a polypus in the right ear, which was removed, but it grew again and was a second time removed; since the removal has had discharge at times from this ear.

Right Ear.—Three years ago had a severe cold, was very deaf for a week, and then gradually recovered; since that attack has been very deaf during a cold. At present is suffering from a cold, and is so deaf as to require to be spoken to loud close to him. Upon examination of the right ear, the surface was observed to be red, and at the posterior part there was a small depression, from which the dermoid layer had been removed by ulceration. When the tympanic cavity is distended there is a bulging outwards of the fibrous layers through the orifice in the dermis. The watch is heard when placed in contact with the ear.

Left Ear.—The dermoid membrane is white and thick; discharge takes place from its surface. Hearing distance, half an inch.

Treatment.—A discharge was kept up over each mastoid process, and small doses of blue pill were administered: by degrees the hearing was somewhat improved.

Ulceration of the Dermoid Layer: Discharge of Blood.—M. S. Chambers, aged 7, was admitted under my care at the St. George's and St. James's Dispensary on January 18, 1850.

History.—A year and a half ago suffered from an attack of small-pox, from which she was very ill for six weeks; a few months after the attack discharge suddenly took place from

both ears, and has remained ever since; it is very offensive, and at times it is bloody; has lately been subject to itching in the ears, and ear-ache, also complains of pain in the forehead, and is giddy. Upon examination of the right ear the surface was observed to be red and tumefied, and there was an orifice at the anterior part through the whole of the laminae.

Left Ear.—The dermis is of a deep red; at the central part the dermis has been destroyed by ulceration, and when the tympanic cavity is distended with air, the fibrous layers bulge outwards.

The treatment pursued consisted in the administration of tonics, in keeping up a discharge from the surface of the mastoid process, and in the use of gentle astringents. After several weeks the discharge gradually diminished, and all pain ceased.

FIBROUS LAMINÆ.

Although the two fibrous laminae are so distinct in their structure and relations, their diseases are so similar, and they are usually so equally affected that it is desirable to consider them together.

The diseases of the fibrous laminae are as follow:—Acute inflammation, chronic inflammation, hypertrophy, ulceration, calcareous degeneration.

Acute Inflammation.—When the fibrous layers of the membrana tympani are the seat of acute inflammation, the mucous membrane of the tympanum is also usually affected in a similar manner. On this account it is not easy to define the symptoms of acute inflammation of the fibrous layers. This affection is usually excited by the application of cold air to the outer surface of the membrane; the suddenly passing from a heated room to a cold air, especially in an easterly wind, is often found to produce it. Like inflammation of the mucous membrane of the tympanum, there is however usually a predisposing cause in a debilitated state of health. The symptoms of this affection are a tickling sensation deep in the ear, often accompanied by involuntary movements of the membrana tympani, produced by the irregular action of the tensor tympani muscle. This sensation increases, and a severe lancinating pain ensues, which is increased by the act of deglutition, the use of the pocket-handkerchief, coughing, or sneezing. Upon examination the surface of the membrane is seen to be shining, its colour is more leaden than usual, and it frequently assumes a reddish hue, from the distension of its vessels with blood. This affection commonly terminates in resolution, but sometimes ulceration ensues, which will be spoken of in a future section. The Treatment of acute inflammation of the fibrous layers of the membrana tympani consists in the use of leeches to the margin of the orifice of the meatus, followed by hot fomentations and poultices; calomel and opium should be administered internally. Cases of this disease will be given when speaking of acute inflammation of the mucous membrane of the tympanum.

Chronic Inflammation and Hypertrophy of the Fibrous Layers.

—In this affection the fibrous layers are for some time congested, or they may become opaque. I shall speak of this disease at length when I enter upon an examination of cases of rigidity of the membrana tympani.

Ulceration of the Fibrous Laminae of the Membrana Tympani.

—This affection usually originates either in acute or chronic catarrhal inflammation of the dermoid layer. Sometimes, however, it is the result of acute inflammation of the fibrous layers. It is commonly met with in persons in debilitated health, and is often attended by considerable constitutional irritation. When it originates in catarrh of the dermoid layer, the latter membrane becomes destroyed in parts, and the outer surface of the radiate fibrous laminae is exposed to view. If in this state the membrana tympani be examined with a speculum and a strong light, the radiate fibrous layer is seen to be red at the floor of a depression, the margins of which are formed by the dermoid layer. Sometimes this surface is covered by deep red granulations, in other cases large portions of the fibrous laminae are exposed, and they pour out an abundant discharge without the presence of any granulations. After remaining for a certain period, and some of the fibres of the fibrous laminae have been destroyed by the ulcerative process, the remaining fibres are so much weakened that the whole lamina falls inwards towards the surface of the promontory, thus greatly diminishing the size of the tympanic cavity. In other instances a great portion of the fibrous laminae is entirely destroyed, and the mucous layer alone remains, while at times portions of all the laminae are destroyed, and a perforation is

the result. Upon inspection, a case of perforation of the membrana tympani produced by ulceration of the fibrous laminae, and advancing from without inwards, can always be distinguished from a case of perforation, originating as it more commonly does in catarrh of the mucous membrane of the tympanum, and advancing from within outwards. In the latter class of cases the margin of the orifice is sharp, smooth, and well defined, and its shape is usually round or oval, and the remaining portion of the membrane is smooth, and retains its natural plane, when, as in cases of perforation from ulceration of the dermoid and fibrous layers, the margins of the orifice and its form are irregular, and the plane of the remaining portion of the membrane deviates from the natural state, it being often funnel-shaped and very concave externally.

When ulceration of the fibrous layers of the membrana tympani is once established, it is liable to remain during many years, and it is one of the diseases hitherto comprised under the term "otorrhœa." Sometimes a large part of the substance of the fibrous layers is entirely removed, and the outer surface of the mucous membrane pours out a secretion. A singular attendant upon this affection of the fibrous laminae of the membrana tympani is a contraction of the carotid canal. I have so frequently found this condition in cases where the membrana tympani has been ulcerated, and have so rarely met with it under other circumstances, that I am induced to consider it as the result of the ulceration. The treatment to be pursued in cases of ulceration of the fibrous laminae consists in washing out the meatus frequently with warm water, and in applying, by means of a syringe, a weak solution of the nitrate of silver, or some astringent, to the part affected. If the membrana tympani has been perforated, the use of an artificial membrana tympani will often be of service. A slight discharge should also be kept up from the surface of the mastoid process. While these local plans are being pursued, measures should be resorted to for the sake of strengthening the health.

CASES.

Ulceration of the Fibrous Laminae of the Membrana Tympani.—W. W., aged 50, a Medical man, residing in London, consulted me, in 1852, on account of a long-standing discharge from the left ear, accompanied by deafness.

History.—In early life, after repeated attacks of ear-ache, a discharge took place from the left ear, which has not ceased for more than a week or two at a time since that period. Lately there has been at times considerable deafness, which has been productive of the greatest inconvenience, inasmuch as the right ear has been useless during many years. Upon syringing the left ear a considerable quantity of offensive matter was removed, whereupon the membrana tympani was distinctly seen. The circumference was in a natural state, but at the central part the dermoid and fibrous layers had been destroyed by ulceration, and the outer surface of the mucous layer was seen. Instead of forming a septum in the situation of the natural organ, it was nearly in contact with the outer surface of the promontory. Upon the patient swallowing with closed nostrils, the mucous membrane was observed to bulge outwards, and form a kind of bubble, which remained until the act of swallowing was again performed, the nose being open, when the membrane again fell inwards. During the time that the membrane was projecting outwards the hearing power was greatly improved, but it diminished as soon as it fell inwards.

The treatment consisted in syringing out the ear twice daily, so as to remove the discharge, in applying a weak solution of nitrate of silver to the outer surface of the membrane, and in keeping up a slight counter-irritation over the mastoid process. The result was, that the power of hearing was improved, and the condition of the mucous membrane was so much strengthened, that instead of falling inwards toward the promontory, it was able to form a tympanic cavity; so long as that remained the hearing was excellent. If from any cause the mucous membrane fell inwards, the performance of the act of deglutition during the closure of the nostrils immediately restored it to its natural position, and improved the hearing.

Ulceration of the Fibrous Laminae of the Membrana Tympani—Giddiness.—Mrs. E. C., aged 38, consulted me in June, 1850, on account of deafness in both ears, accompanied by giddiness and a discharge.

History.—Twenty years previously she suffered from a bad cold, which was followed by deafness and a discharge from both

ears; this discharge has continued up to the present time. Has been subject to attacks of ear-ache, which have been usually followed by an increase of the discharge; during a cold the discharge is much more abundant, when it often becomes very offensive. During the last year has been much worse, and has complained of much singing in the head, accompanied by giddiness. She requires to be spoken to distinctly within the distance of a yard. Upon examination, a quantity of fluid discharge having been removed from each meatus, the right membrana tympani, at the posterior and lower part, was white and thick, the anterior and upper part had fallen inwards, and appeared as if attached to the promontory; its outer surface was uneven, and poured out the discharge; air passed through the Eustachian tube. Hearing distance two inches.

Left Ear.—Hearing distance one inch. The upper half of the membrana tympani had fallen inwards, was red, and poured out a discharge. The treatment consisted in keeping up a discharge from the back of the neck, in syringing out the ears twice daily, and in applying a solution of nitrate of silver (gr. xx. ad ʒj.) to the surface of the membrane. This treatment was pursued during two months; the discharge gradually disappeared, and the hearing was much improved.

Calcareous Degeneration of the Membrana Tympani.

The fibrous laminae of the membrana tympani not unfrequently undergo calcareous degeneration. This change occurs at all periods of life, it sometimes takes place when the remaining portion of the membrane is perfectly healthy, and when no other abnormal state can be detected in the organ. In some cases this calcareous condition of the membrane is symptomatic of calcareous deposit within the tympanic cavity; in other cases it follows, and appears to be produced by, chronic inflammation with or without catarrh of the dermoid layer. After ulceration and destruction of portions of the membrane, the residue is at times converted into calcareous matter. In some cases the calcareous matter is arranged in a circular form, when it will be found to be deposited in the circular fibrous layer; at other times it assumes a radiate form, and then the radiate fibrous layer is the seat of the deposit. In other cases the whole mass of the membrane is converted into calcareous matter. Where there is much diminution of the power of hearing in cases of calcareous degeneration of the membrana tympani, there is usually partial or complete ankylosis of the stapes to the fenestra ovalis, and any treatment must have for its object the diminution of this ankylosis. Patients applying for relief in such cases must, therefore, be treated by counter-irritation over the mastoid process, and by the administration of small doses of mercury.

CASES.

M. C., aged 32, consulted me in December, 1854. The history of his case was, that when a child he had an attack of measles, which was followed by considerable diminution of the power of hearing, so that he has ever since been unable to hear unless the voice of the speaker is raised higher than natural, and brought nearer to him. There has been discharge for many years from the right ear. Upon examination, the meatus of the right ear was found to be full of thick discharge; when this was removed, by means of the syringe, the upper half of the membrana tympani was seen to be calcareous, the lower half being transparent. The Eustachian tube was pervious. The watch was not heard when in contact with the ear; the crack of the nail was heard at the distance of a foot.

Left Ear.—The anterior half of the membrana tympani was calcareous. Eustachian tube pervious. Hearing power the same as in the opposite ear. Gentle counter-irritation over the mastoid process was ordered; the patient was not seen a second time.

J. G. T., Esq., aged 18, consulted me in 1855. The general health was good, and there was no hereditary tendency to deafness.

History.—Five years previously dulness of hearing slowly appeared after an attack of influenza; two years subsequently to the influenza suffered from scarlet fever, which was followed by discharge from each ear, and by considerable increase to the deafness. The discharge has now disappeared, but there is so much deafness that he requires to be spoken to loudly within three feet. At times, especially during a cold, ear-ache is complained of. On examination of the right ear, the watch was heard at the distance of half an inch. The greater part

of the lower half of the membrana tympani was converted into a mass of calcareous matter of a crescentic shape; the other part of the membrane was healthy. Eustachian tube pervious.

Left Ear.—The watch is heard on pressure over the ear, and over the temple the membrana tympani is more concave than natural; and there was a patch of calcareous matter, similar in shape and size to that of the right ear. Eustachian tube pervious. The same treatment was pursued as in the last case, with some benefit.

Mrs. B., aged 34, in good health, but subject to bilious attacks, consulted me in 1854.

History.—Since an attack of ear-ache when a child the left ear has been useless. Three months ago the right ear became suddenly deaf after a cold; the deafness was treated by syringing, the operation being followed by slight bleeding, but no immediate improvement. After a few days the hearing improved, but the ear was extremely sensitive, and there was a constant feeling of reverberation in the ear. When more than one person spoke at a time a feeling of confusion in the ear was produced; during the act of swallowing a grating sound was produced in the ear; a noise like that of a waterfall is constantly present on the right side. Upon examination of the right ear, the larger part of the membrana tympani of the right ear was calcareous; the Eustachian tube was pervious; the hearing distance was six inches. The membrana tympani of the left ear was fallen in so as to be in contact with the promontory. The tick of the watch was not heard; the crack of the nail was heard at the distance of three inches. The treatment consisted in keeping up a slight discharge from the surface of the mastoid process, which was followed by a great diminution of the distressing noises in the ears.

ORIGINAL COMMUNICATIONS.

ON THE FORMS OF REMITTENT FEVER PREVALENT IN THE METROPOLIS.

By THOMAS B. PEACOCK, M.D.

Assistant Physician to St. Thomas's Hospital, and Physician to the City of London Hospital for Diseases of the Chest, Victoria Park.

From the writings of Sydenham, (a) Morton, (b) and others, (c) we learn that during the sixteenth and seventeenth centuries fevers of a remittent or intermittent type were extremely common in London, and occasioned a large amount of mortality. In the middle of the last century (d) we are informed that those affections were no longer generally prevalent, but only appeared epidemically in peculiar seasons and under unfavourable atmospheric conditions; and, at the commencement of the present century, (e) they had become still less common, so that they were very seldom seen in persons resident in the metropolis, though still prevalent in the adjacent districts.

At the present time the cases of intermittent fever which occur in town are most commonly in persons who have returned from marshy neighbourhoods, either quite recently or within a few months; but the malarious influence in the metropolis itself, is sufficiently powerful to imprint a periodic character upon various local affections, and occasionally to give rise to fevers of a remittent type. Recently, and especially during the last autumn and winter, affections of the latter kind have been unusually prevalent.

In the present paper I propose to bring before the Society some examples of the forms of remittent fever which have fallen under my notice within the last few years.

NOTE.—[It is a question of some interest whether the preva-

lence of ague has diminished in the metropolis and adjacent districts within the present century, and the statistics published by Sir Gilbert Blane of the cases treated by him towards the end of the last century at St. Thomas's Hospital afford us the means of making a comparison between the experience of that Institution in his time and at the present.

He states that from 1783 to 1794 he treated 3834 cases of disease of all kinds, and that of those 192 were cases of intermittent fever, so that the latter were in the proportion of five per cent. of the whole of the cases treated.

Taking the year 1855 as, so far as I am aware, an average year, I find that of 1859 medical cases treated for various diseases in the wards of St. Thomas's Hospital, 19 were cases of intermittent fever, or the cases of ague constituted 1.02 per cent. of the whole of those treated.

At the period, however, in which Sir Gilbert Blane's observations were made, out-patients were relieved at St. Thomas's Hospital only once a week; and, as the facilities for coming to town from the adjacent districts to obtain medical aid were then much less than at present, it may be inferred that cases of ague would be received into the wards which would now only be treated as out-patients. It becomes, therefore, necessary, to constitute a more accurate comparison, to ascertain the number of cases of ague admitted as out-patients, and the proportion which they bore to the whole of the cases so relieved. Taking the same year, 1855, I find that there were treated as out-patients, by Dr. Bristowe and myself, 3433 cases of diseases of all kinds, and that of these 80 were cases of intermittent fever. So that, of a total of 5292 medical patients treated at St. Thomas's Hospital for different diseases, 99 were cases of intermittent fever. These cases constituted, therefore, 1.87 of the whole number, or only about one-third of the proportion which they bore to other forms of disease in the time of Sir Gilbert Blane, sixty to seventy years ago. It therefore follows that the diminution in the prevalence of ague is very considerable, for the facilities now afforded to persons resident at a distance from town of availing themselves of the medical charities of the metropolis, and the greatly increased population of the aguish districts adjacent to London, would tend to swell the number of persons now treated for ague at the London Hospitals.

The diminution in the prevalence of ague in the metropolis itself is not however probably material during that period. Indeed, Sir Gilbert Blane informs us that ague had almost entirely ceased to occur in London in his day, and the cases which he treated he believed to have been nearly all imported from malarious districts around, and the same rule applies at the present time. If, however, we go back to a period of 100 years before the time of Sir Gilbert Blane, we find the disease prevailing in situations where it is now wholly unknown; thus Morton, writing in 1691, gives the residence of a considerable number of patients whom he had treated for intermittent fever or other form of periodic disease. Amongst them we find Russell-street, Covent-garden; Fleet-street, Fetter-lane, Bridewell, Newgate-street, Paternoster-row, Cheapside, Old Change, Foster-lane, Bull-and-mouth-street, Noble-street, Smithfield, Whitecross-street, Cow Cross, St. John-street, Lothbury, Fenchurch-street, Little St. Helen's, London House-yard, Cursitor's-alley, and Mile-end. At the present time, I believe, ague rarely occurs, except on the south side of the river, especially in Bermondsey and Rotherhithe, and chiefly in persons who have previously been exposed to the influence of malaria in Kent or Essex, or other aguish districts. The forms of ague with which we at present meet are also more tractable and milder than those which formerly prevailed. Thus, Sir Gilbert Blane states, that of the 192 cases which he had treated at St. Thomas's Hospital, deducting 13 which were not specified, 66 were quotidian, 83 tertian, and 30 quartan; whereas, of 80 cases of which I possess notes, 24 were quotidian, 2 double quotidian, 42 tertian, 11 irregular or imperfect, and only one quartan.

The proportion of cases of continued fever treated at St. Thomas's Hospital has also greatly diminished since the time of Sir Gilbert Blane. Those cases then constituted 12.85 per cent. of the whole of those treated. Whereas, at the present time, or rather during the year 1855, they amounted to only 5.16 per cent. of the whole of the cases; but as during the last 30 years special accommodation has been afforded for the treatment of cases of fever, by the establishment of the Fever Hospital, no satisfactory inference can be founded on this fact.]

(a) Epidemic Constitution of Years 1661, 1662, 1663, and 1664 in London. Works, Sydenham Society's Translation, vol. i. p. 41.

(b) Richardi Morton, Pyretologia sive Tractatus de Morbis acutis universalibus. Editio novissima Genevæ, 1727. Appendix, p. 153.

(c) These and other authorities are referred to in Observations on the Increase and Decrease of Different Diseases, and particularly of the Plague. By W. Heberden, jun., M.D., F.R.S., London, 1801, p. 72; and also in Select Dissertations, by Sir G. Blane, Bart., London, 1822, p. 119, Dis. IV.; also Med. Chir. Trans., vol. iv.

(d) On the Weather and Diseases of London in 1753 and 1754. Fothergill's Works by Lettsom, 1784. Pp. 111—126. An Enquiry into the Nature, Rise, and Progress of the Fevers most common in London. By W. Grant, M.D., London, 1770.

(e) Sir Gilbert Blane, *supra*, p. 150.

Symptoms.—The most common form of remittent fever is that in which the symptoms assume at first a continued form, but in which after a time, more or less marked exacerbations and remissions occur; or in which, after paroxysms of an aguish character, the symptoms of continued fever supervene.

The commencement of this form of fever is generally sudden, the patient being seized with rigors, followed by heat and sweating; but in some cases the disease advances gradually and insidiously, and its nature only becomes apparent after some time has elapsed. The attack is generally characterized by the occurrence of exacerbations or remissions occurring once or oftener in the day, on alternate days, or at longer and irregular intervals. Sometimes while there are slighter exacerbations occurring every night or every other night, there are more serious relapses, which take place at intervals of twelve or fourteen days, and after the patient has to a considerable extent recovered his strength. The exacerbations generally commence with some feeling of faintness, cold or decided rigors; the surface of the body becomes cool, and the extremities cold and livid; the pulse is feeble, sometimes intermittent, and generally there is nausea or retching and vomiting. After a longer or shorter time reaction ensues, the skin becomes warm and occasionally pungently hot and dry; the face is flushed, sometimes extremely turgid; the pulse is quick, full and bounding, and there is restlessness, headache and delirium, with vomiting or diarrhoea. After five or six hours these symptoms subside, the skin becomes moist, and then profuse and often protracted perspirations break out, the pulse falls both in force and frequency, and the patient is left greatly exhausted. The symptoms vary, however, both in character and intensity; the first and second stages are sometimes very imperfectly marked, and there is little to indicate the exacerbation except the increased fever, restlessness or delirium at night, and the tendency to perspiration in the morning. Except during the exacerbations, the symptoms of fever are not ordinarily intense; the pulse is usually only moderately quick; the tongue, though coated with a thick fur, does not generally become dry or brown, or is so only during the exhaustion following the paroxysms; the skin is warm and moist, not generally very dry or harsh; the mind remains clear, or is but slightly affected, and though the prostration of strength is great and rapid, it is usually not of long duration. There is, however, very generally a great tendency to complication with disorder of the liver, shown by the occurrence of jaundice, pain or tenderness in the right hypochondrium, and bilious vomiting or diarrhoea; with rheumatic symptoms; bronchitis or pneumonia; and, occasionally towards the end of an attack, with purpurous eruptions on the skin, and discharges of blood from the mucous membranes, especially of the bowels or kidneys, and albuminous urine.

Dr. Grant, writing on the epidemic diseases of London, about the middle of the last century, well describes this form of fever, under the name of "fever and ague," or "unformed ague," as he had observed it in certain malarious districts of the continent during autumn, and in particular seasons in London, "when there is an aguish epidemic constitution and frequent northerly or north-easterly winds." At the present time it is certainly not by any means of common occurrence in the metropolis, and is chiefly observed in persons who have come recently from marshy districts of this country, or who have returned from some tropical climate in which intermittent or remittent fevers are endemic. Occasionally, however, it is seen in persons who have been for some time resident in the metropolis or its immediate neighbourhood, in districts not usually productive of malarious affections, and in persons whose social position generally grants immunity from such diseases, and, as I before said, this has been especially the case recently.

Of the dependence of this form of fever upon the same causes which give rise to ague there can be no doubt. Various authors, more especially the writers upon the diseases of the Army and Navy, and more particularly during the wars in the Low Countries, at the earlier part of this and in the middle of the last centuries, describe the epidemics as losing in the autumn their intermittent and acquiring a remittent character, and again returning to the former type with the advance of winter; and similar observations have been made in marshy districts of this country. Generally, this tendency has been ascribed to the greater intensity of the paludal miasms during autumn, or to the greater susceptibility of

individuals to its influence, from having been only recently exposed. In London, however, at the present time the production of remittent fever seems rather due to the operation of the ordinary causes of fever upon persons predisposed to ague, than on any special intensity of the malarious influence; thus, the most common exciting causes are either great destitution, to which the subjects of the disease have been exposed, and which has subjected them unusually to the influence of the weather, as by sleeping in the open air; or their having committed great and prolonged excesses.

The mortality which is occasioned by this form of fever is less than from the severity of the symptoms would be anticipated, and the patient usually recovers his strength more rapidly than after attacks of true continued fever. I have, however, met with two cases in which the disease proved fatal. Of six well-marked cases of which I possess notes, and which terminated favourably, the convalescence was established on the 13th, 14th, 18th, 19th, 22nd and 23d days from the commencement of illness, and in seven cases the patients were discharged from the Hospital

on the 5th day from admission, and the 19th from seizure.

" 15th	.	.	.	19th	"
" 16th	.	.	.	19th	"
" 19th	.	.	.	21st	"
" 24th	.	.	.	28th	"
" 33rd	.	.	.	61st	"
" 40th	.	.	.	42nd	"

Of the two cases which proved fatal, one died on the 6th day from admission, and 27th from seizure; the other in the ninth week of illness.

(To be continued.)

ON THE RECENT ACCIDENT FROM CHLOROFORM.

By JOHN SNOW, M.D.

IN the case recorded by Mr. Paget, in the *Medical Times and Gazette* of the 7th inst., the symptoms were observed with unusual care, and described with great clearness; hence the case is one of more than ordinary value, as illustrating the manner in which accidents from chloroform occur. The symptoms in this case were so clear and well marked that they would almost enable us to come to a correct conclusion as to the cause of death if we had no set of exact and systematic experiments on the subject. The chloroform at the moment of the accident was given so as not to interfere with free respiration; the boy had as much air as he could breathe, and did in fact take a long inspiration just when the accident occurred. There was, however, every facility for the air which the patient breathed to be highly charged with vapour of chloroform, as it passed over the lint and cotton wool held half an inch from the face. The effect of the chloroform taken into the lungs by the long inspiration just mentioned was most marked on the action of the heart. According to Mr. Paget's account the pulse, which "had to this time been normal, suddenly began to beat very quickly; then it ceased for two or three seconds; then beat rapidly several times with a kind of flickering movement, and then ceased to be perceptible." Whilst the heart was thus paralysed by the chloroform the brain was not seriously affected by it, for after a few stertorous breathings he breathed naturally for at least a minute, when the respiration began to fail from the want of circulation of blood through the brain.

So much is suggested by a mere reflection on this case, but when it is compared with experiments and observations that I have made on animals there can no longer be any doubt as to the exact cause of death; and I should like to observe that as chloroform produces precisely the same effect on the smaller domestic animals as we daily witness in man, up to a state of complete insensibility, it is very evident that when they are killed by it in such a way that their death resembles exactly the sudden accidents which have happened occasionally to the human species, the cause of death and the conditions under which it occurs must be the same. The strength of the vapour of chloroform which I find most suitable for causing insensibility in patients is about four volumes in one hundred volumes of air; and I ascertained by experiments which I performed some years ago that when animals are made to breathe the vapour of this strength till they are

killed, death takes place very slowly, the insensibility becomes very profound, with complete relaxation of the voluntary muscles, the breathing becomes embarrassed or very feeble before it ceases, and after it has ceased the heart continues to beat distinctly for a minute or longer, during which interval the creature can easily be restored by artificial respiration. I found, moreover, that at the moment when the heart ceases to beat from over-distension of its right cavities, there is often a deep gasping inspiration, which frequently has the effect of setting about the recovery of the animal if the vapour have been withdrawn.

On the other hand, I ascertained that when animals are made to breathe vapour of chloroform of twice the usual strength or more, that is, of eight or ten parts to one hundred of air, the death is very sudden, taking place in some cases even before insensibility has been induced, and the heart ceases to act, either at the same time as the respiration or before it. These are two distinct modes in which death takes place from chloroform, although with vapour of intermediate strength one mode of dying may more or less encroach on the other.

There is no recorded case of accident from chloroform in the hands of a medical man where the death took place in the first of the above-mentioned modes, as it would do if vapour of the proper strength were continued too long, in the disregard or misconception of gradually approaching dangerous symptoms; in all the recorded cases the death, or at least the fatal symptoms, set in suddenly, generally almost instantaneously, and, in the cases where the pulse was not observed, the sudden pallor or stoppage of bleeding sufficiently indicated that the circulation was arrested. Omitting two cases of fatal syncope, apparently from fear, which have sometimes been attributed to chloroform, there seems to have been ample opportunity in every instance for the vapour to be inhaled in too strong a form, and the result shows that this must have been the case.

In some of the recorded cases of deaths from chloroform the last beat of the pulse was as good as those which preceded it, but more frequently it has been noticed to become very weak just before it ceased. In Mr. Paget's case it beat very rapidly several times, and intermitted for two or three seconds before it finally ceased. In the numerous instances in which I have killed animals quickly with air strongly charged with chloroform, I have generally found the action of the heart to become weak just before it ceased, and in two or three cases, of which I have notes, it beat with extreme rapidity when its action was just on the point of ceasing.

The case under consideration supplies a clear refutation of two of the most serious and prevalent errors respecting chloroform. The first of these is that the patient is safe so long as he has sufficient air for the purposes of respiration; and the second, that close attention to the pulse and the general condition of the patient may of themselves avert danger. Both these rules are right enough, but the present case proves that they will not of themselves avert danger. Indeed the more air the patient breathes the greater is his danger, if the air be too highly charged with the vapour of chloroform; and I have often had occasion to point out the risk arising from a deep inspiration, such as occurred in this case, if the air should contain too much of the vapour. No case could apparently have been more carefully watched than the one under consideration; but the truth is that the first rule to be observed in giving chloroform, is to have the vapour so diluted that it cannot occasion sudden death, and the second rule is, to closely watch every symptom in the patient, so that one may leave off at the right moment, and not produce an unnecessary amount of oppression of the brain, with stertorous or embarrassed breathing.

Mr. Paget says that the quantity of chloroform poured on the cotton wool just before the accident was about forty drops. He probably means a quantity equal to about forty minims, as forty drops of chloroform from a small phial are not quite equal to nine minims; and although that portion of the inhaled chloroform which, by circulating through the coronary arteries, paralyses the heart and causes a sudden accident, must be extremely small, it is not likely that sudden death would occur unless the vapour of several minims of chloroform were to gain access to the lungs in a short time, so as to impregnate the blood passing through these organs very strongly with the agent. The power of chloroform to paralyse the heart by its direct action having been established by experi-

ment, (a) it can be easily understood how this may occur during the inhalation of strong vapour without the functions of the brain and medulla oblongata being entirely abolished, although their functions cease first when the vapour is slowly introduced; for the coronary arteries being the first given off, the heart must receive its supply of the blood newly arrived from the lungs a little in advance of the brain, and becoming more or less completely paralysed the brain suffers rather from the want of circulation, than from the direct effect of the chloroform. In many cases of accident, however, the heart and brain are both overwhelmed by the narcotic vapour at the same moment, as might be expected.

It must be quite obvious that a handkerchief, or cotton wool, or lint can afford no adequate means of properly regulating the amount of vapour in the inspired air, when a patient is to be rendered quite insensible by chloroform; and when Medical men do not take the trouble to use an inhaler, which they have studied with the view to regulating these proportions, they should, as I have several times recommended, dilute the chloroform before using it with an equal measure of spirits of wine. The alcohol is hardly any of it inhaled, but it acts by lowering the tension of the vapour, and diminishing the quantity which is inhaled. For instance, 100 cubic inches of air when saturated at 60° Fahr. with vapour from pure chloroform, takes up 14 cubic inches, and it would be dangerous to inhale it of half this strength; but when the chloroform is diluted with an equal measure of spirit, it will only yield 8 per cent. of vapour to the air at 60°, even when fully saturated; practically, it easily yields enough to cause insensibility, but not to cause sudden accident.

There is one opinion, which has many advocates among intelligent Medical men, although it seems to me to be supported neither by facts nor reason. It is, that fear on the part of the patient is a cause of death from chloroform. If this were so, accidents might be extremely common; for many patients inhale it, unfortunately, with great fear, only because they have a still greater fear of pain; children, also, are usually afraid of anything so strange, yet accidents have seldom happened to them. Mr. Paget's patient was rendered insensible with safety, notwithstanding his fear, and also a second time after his waking. At the time of the accident he indicated by movements some degree of sensibility, but was not conscious, and therefore could not be under the influence of fear. If chloroform were forbidden, as some recommend, in cases where the patient is frightened, its employment would be extremely limited, and those who most require it would be entirely deprived of its use. It is, indeed, desirable to try to calm any needless fears the patient may have, for fear is injurious while it lasts; and there are two cases—the one at Mr. Robinson's, and the other at St. George's Hospital—where the patients died suddenly, before enough chloroform had been inhaled to produce any appreciable effect; but these were not deaths from chloroform; and had the patients lived to come under its influence, their fears would have subsided, and they would probably have been as safe as the thousands who yearly commence to inhale it with great fear. Excessive fear and an overdose of chloroform may either of them cause sudden death, just as infancy and old age both predispose to bronchitis; but they cannot combine to cause an accident in the same case. In fact, as soon as a patient becomes unconscious from chloroform, the effects of fear on the pulse quickly subside.

I have on this occasion, as on all others, thought it my duty to express my views as clearly as I could on the subject of chloroform; but it is not my wish to imply any censure on those, either at home or abroad, who do not agree to my views, or follow the same practice. A commission, which lately sat in Paris, reported that in death from chloroform the breathing always ceases before the action of the heart. It doubtless was so in the experiments they performed; and if, in giving chloroform in what may be called the ordinary way, it always cut off the animal suddenly, in the middle of the experiment, we should be at a loss to understand how it could be exhibited to patients in that way at all. Fatal accidents from chloroform are, however, rare under any circumstances, and a careful consideration of those which are well recorded, like the one under our consideration, as well as experiments on animals, contrived and arranged systematically for the purpose, clearly point out the way in which the accidents occur, and how they may be avoided.

Sackville-street, March, 1857.

(a) On Narcotism by Inhalation, *Med. Times and Gazette*, 1848, vol. ii.

ON THE MORTALITY OF THE METROPOLIS DURING THE PAST AUTUMN.

By J. J. FOX, Esq.

XVII. Mortality of the Autumn from all Causes.

THE deaths registered in the thirteen weeks ending December 27, 1856, were 14,118. Making the usual estimate for increase of population, this is at the rate of 536 deaths to every 100,000 persons living. The average mortality in the fourth quarter of the year, during the previous sixteen years from 1840 to 1855, was 626; the past season is, therefore, about 14 per cent. below the average autumn mortality. No previous year has presented a mortality so much below the average in this quarter; 1850 and 1855, which were previously the lowest, being respectively 548 and 547 per 100,000. The severe epidemic of influenza in 1847 made the autumn mortality of that year very high; it reached 833, which is 297 more than the rate for the past season, a difference amounting to as much as 47 per cent. of the average mortality. It will be seen, by comparing this with my former papers, (*Medical Times and Gazette*, for Aug. 16 and Nov. 8,) that as far as the experience of these seventeen years is to be depended on, neither winter, spring, nor summer, (omitting the cholera deaths,) have so wide a range of mortality between one year and another.

XVIII. Distribution of the Autumn Mortality among various Diseases.

The total mortality of the past season being 14 per cent. below the average, let us see how this standard of salubrity applies to the various diseases and classes of disease of which it is the combined effect. The following lists will show, that together with low total mortality and a very small manifestation of some forms of disease, there yet co-exist others more fatal than usual:—

A. Causes of death above the average of former autumns:—

	Per cent.
Diseases of the kidneys	24
Bronchitis	24
Croup	5½
Diseases of respiratory organs	3½
Pneumonia	1½
Diseases of the heart, etc.	½

B. Causes of death below the average of former autumns, but not so much below as the total mortality:—

	Per cent.
Consumption	1½
Hooping cough	4½
Premature birth and debility	5
Diseases of uncertain seat	8
Erysipelas	10
Paralysis	11½

C. Causes of death below the average of former autumns, and differing from the average by a greater per-centage than the total mortality:—

	Per cent.
Apoplexy	15
Diseases of digestive organs	15
Measles	16
Diseases of nervous system	17
Teething	17½
Class of rheumatic diseases (including rheumatic fever)	20
Hydrocephalus, cephalitis, and convulsions	20
Typhus	25
Zymotic diseases	28
Diarrhœa	29
Scarlatina	30
Small-pox	73

The special character of the season has therefore been, that zymotic diseases have been unusually low, especially small-pox, scarlatina, diarrhœa, and typhus. The first of these has steadily declined through each quarter of the year, being 18, 38, 52, and 73 per cent. below the average mortality of the respective seasons. On the other hand, the past autumn has been marked by high mortality from bronchitis; diseases of the respiratory organs generally, and pneumonia being also above the average, but not to so great an extent. Deaths

from diseases of the kidneys continue very numerous, though their relative excess has rather lessened since the summer.

XIX. Atmospheric Character of the Autumn.

In temperature the mean of the past quarter has been very near the average of former autumns. October was a warm month, but in its last week cold weather set in, and November was unusually cold. December exhibited most striking alternations of temperature; in one instance a rise of nearly 16° between the mean temperature of one day and the succeeding one. The greatest cold of the season was in the first week of December, when it reached 18½ in the air at Greenwich Observatory and 9½ on the grass. These points are several degrees lower than the average of the respective minima in the previous twelve years.

The mean daily range of the quarter has been very nearly the same as usual in autumn, although in the month of December it must have been very considerable.

Rain has fallen in every week of the quarter except one, and yet its total quantity is very much below the average of the twelve previous autumns. The only year since 1844 inclusive that presents so small an amount of rain in its fourth quarter is 1851, and that agrees with the past quarter in its mean reading of the barometer being considerably above the average. To estimate, however, the complex influence of weather on mortality we must take the meteorological data for smaller periods than quarters, and even then the problem is surrounded with difficulties. I trust the committee formed for the purpose of this investigation, by the associated officers of health, may be able to ascertain some general principles that will lessen the extreme intricacy of the subject.

XX. Relative Mortality of Divisions of the Metropolis.

The mortality of the past autumn, or proportion of deaths to 100,000 living, in the several divisions or groups of districts, stands as follows:—

North	502
West	510
Central	535
Total	536
South	560
East	569

This order is nearly the same as that in which the respective divisions stood in the summer quarter, except that the Western and Central divisions have changed places. For every 100,000 inhabitants, 67 persons have died in the Eastern division, more than have died in the Northern. As compared with the Summer, there is improvement in the North and West divisions, but a higher mortality in the South and East, and considerably higher in the Central, while for the whole metropolis the mortality of the two seasons is about the same. Although as compared with the Northern and Western divisions, the mortality of the other three seems high, yet the difference between the Northern, or division of lowest mortality, and Eastern, or division of highest mortality, is not so great as it was on the average of the previous eleven autumns, 1845-55. The corresponding numbers, deduced from eleven years, stand thus:—

North	557
West	561
Central	620
South	657
East	679

from which it appears that the difference between the Northern and Eastern is 122, instead of 67, as in the autumn of 1856. In other words, the improvement, as measured by the per-centage of the mortality below the average of the same season and locality, is greatest in the least healthy districts; the Northern and Western are 9 per cent. below the average of the previous eleven years; the Central 13 per cent. Southern 14 per cent., and Eastern as much as 16 per cent. below. A healthy season, such as the past, does not equally improve the health of every quarter of the town, but tends to equalize the health of the whole, by a greater improvement of the unhealthy districts.

Stoke Newington, January, 1857.

P.S.—The calculations in this paper have been made for the quarter of thirteen weeks ending December 27th. Since it was written, the Registrar-General's Quarterly Report has appeared, giving the number of deaths for the three calendar

months ending December 31st. They amount to 14,616, showing that many more deaths were registered in the last four days of December than in the last three days of September. The mortality of the quarter, so corrected, amounts to 549 per 100,000, which, it will be seen by the first paragraph, is rather *over* the mortalities of the same season in 1850 and 55, instead of *under*, as I have represented above.

THE LONDON

PRACTICE OF MEDICINE AND SURGERY.

ST. MARK'S AND OTHER HOSPITALS.

CLINICAL COMMENTARIES ON DISEASES OF THE RECTUM.

(Concluded from page 249.)

No. VIII.—DANGER INCIDENT TO TYING INTERNAL PILES.

AN opinion prevails that the ligature of hæmorrhoids is attended with considerable risk from phlebitis, peritonitis, pelvic abscesses, etc. On this point we may place together the following statements of experience:—Mr. Curling writes, "No fatal case has come under my own notice, either in public or private practice." Mr. Salmon the other day stated to his clinique that he had never lost a case from phlebitis, and but one from tetanus; and this it must be noticed is after an experience very large indeed, no week passing at St. Mark's in which several cases are not so treated. Mr. Coulson stated at a discussion at the Medical Society that he had never lost a patient after ligature of piles, and it is a favourite operation with him. At Guy's Mr. Cock and Mr. Hilton both frequently use the ligature, and speak of its dangers as very trivial. Sir B. Brodie never operates except by ligature, and states that "there is no objection to it." In 1835 he had lost but two patients from its application. Sir Astley Cooper, after having, as is well known, lost several patients from excision, always employed ligatures. Mr. Ashton speaks most favourably of the practice by ligature, but does not enter into details as to any fatality it may have had under his observation. Mr. Quain states that he has met with but one fatal case. Mr. Copeland also mentions having had one. Mr. Quain writes, "An unfavourable, or even an unsatisfactory termination is of extremely rare occurrence." Mr. Syme writes (1846), "In the whole of my practice I never met with a case which either terminated fatally or threatened to do so."

In the course of nearly four years of tolerably intimate acquaintanceship with the practice of most of the London Hospitals, the writer has not heard of any single fatality after tying piles; and our "Provincial Hospital Reports" have included but one, and that the only one we have had to record during the same period. In it the patient was an old and much diseased man, and death from a low form of peritonitis with questionable pyæmia followed on the eighteenth day. See *Medical Times and Gazette* for July 19, 1856, page 63. It is worthy of note that in this case a cuticular external, and, therefore, probably a venous pile, was tied.

With the above amount of evidence before us, we may fairly conclude that ill consequences after ligature of piles, performed in moderately healthy persons, and with due attention to the exclusion of dilated veins, are exceedingly rare, and that the operation is a perfectly safe procedure.

No. IX.—INTERNAL HÆMORRHOIDS OUGHT NEVER TO BE EXCISED.

There are few principles more unquestionably established in British surgery than that on account of the risk of uncontrollable hæmorrhage internal piles ought never to be excised.

In this rule Sir Astley Cooper, Sir B. Brodie, Mr. Salmon, Mr. Curling, Mr. Quain, Mr. Ashton, Mr. Syme and Dr. Brooke, all emphatically concur.

No. X.—WHAT ARE INTERNAL HÆMORRHOIDS?

Preparatory to entering upon any questions as to their treatment we must a little clear the way by a few words as to the real nature of internal hæmorrhoids. That "internal piles," in their ordinary form, are dilated or varicose veins of the anus, may now safely be pronounced a relic of bygone and very mistaken pathology. If cut across they bleed most profusely; but the hæmorrhage is arterial, not venous; and if tied, there is little or no risk of phlebitis. On dissection they show scattered, small, venous cysts, but these are minute in proportion to the mass; and should a large coagulum be found, it has more the appearance of being the result of extravasation than the contents of a varix. They are not at all more liable to occur in those who suffer from varices in the legs, etc., or varicocele, than in others. The *dilatatio venarum* theory has, indeed, been specifically renounced by most of the recent teachers and writers on the subject. Mr. Salmon is very positive in his opinion on this point, and he is supported to the full by Mr. Ashton and Mr. Syme. And here the distinction between external and internal piles must be borne in mind; the former, a rare and comparatively unimportant form, are admitted by all to be venous. External piles have, when the skin is thin, the uniform bluish tint of a vein, which cannot well be mistaken, while the purple colour of the internal one rather resembles that of the intense congestion of almost strangulated mucous membrane. External piles may be snipped off, and there is no danger of bleeding after the vein has once emptied itself; internal ones, if cut away, bleed continuously and profusely, and their hæmorrhage, as just stated, is arterial, not venous.

We come, then, to the question, What are internal hæmorrhoids? and to this the answer must be, that they consist of prolapsed folds of the mucous membrane lining the sphincter, extremely vascular, and hypertrophied and thickened by long constriction. In children the parts about the rectum, the sphincter, etc., are lax, and the mucous membrane is very loosely connected to the muscular one; hence their liability to large prolapse, which in them always comprises the whole circumference of the bowel. In adults, however, the sphincter is more firm, and the mucous and muscular coats much more closely connected; hence the great rarity of circular prolapse. From the necessity that the mucous membrane lining the sphincter itself should be capable of wide dilatation during defæcation, an arrangement has resulted, however, by which, during the closed state of that muscle, it is thrown into longitudinal folds, which are smoothed out when it opens. Between these folds, which, first described by Morgagni, are known as Morgagni's columns, the mucous and muscular coats are more closely united to each other, whilst, beneath them, the intervening cellular tissue is, of course, loose. These columns vary in number from three to six. By reference to this arrangement, the reason why extruded piles almost always present the appearance of being divided into lobes is easy to be assigned (a). Mr. Salmon defines piles as prolapsed Morgagnian columns, hypertrophied and rendered vascular by constriction, and states that their divisions into segments correspond in number with the number of the columns in the individual. Thus, then, we have it clearly explained upon anatomical grounds why children almost never have piles, and why adults so very rarely have circular prolapse, and also why adults who have circular prolapse never have "piles," as a complication; the latter fact being one, which, upon the old view of their being distinct conditions, it would be very difficult to account for. We have already adverted to the importance, in respect to treatment, of this view of their nature, and how well it coincides with the results of practice. No one would fear ill consequences from tying up a mass of congested and thickened mucous membrane, while every surgeon would shrink from the risk attendant on putting ligatures on bunches of inflamed veins (b).

(a) It is this division in lobes which has so much strengthened the idea of their being dilated veins.

(b) It is but right to state that the reader will find opinions widely differing from the above, as to the nature of internal hæmorrhoids, in the works of Mr. Curling and Mr. Quain. That dilated veins are sometimes met with, constituting internal piles, is fully admitted, and we shall have to advert to that form of disease very shortly; we believe, however, that it is exceedingly rare and exceptional.

HOSPITAL NOTES.

THE ACTUAL CAUTERY IN CASES OF DISEASED JOINTS.

The employment of the actual cautery in certain cases of diseased joints, appears to be decidedly gaining favour in the London Hospitals. It is, as many of our readers well know, a great favourite with Mr. Syme, of Edinburgh. Mr. Erichsen not unfrequently employs it, and thinks highly of its advantages; and Mr. Moore, of the Middlesex, assures us that in numerous cases under his care, and that of Mr. De Morgan, the benefits obtained from it have been most marked. The cases for which it appears best adapted are those of advancing disorganisation attended by severe pain. The gnawing pain, nocturnal startings, etc., will often cease as if by magic, after the use of the cautery, and the patient's general health, as might be expected, greatly improve. We recollect, some years ago, hearing Mr. Green remark at the bedside of a case of hip-joint disease in St. Thomas's, that the result of his experience regarding the use of setons, etc., had been, that the degree of pain measured the necessity for their employment. When severe pain existed, then they were very useful. This quite tallies with experience respecting the actual cautery. The mode of using the latter is to pencil over the surface lightly with many lines, the patient being, of course, under chloroform.

CANCER OF THE TONGUE REMOVED WITHOUT BLEEDING, BY THE ÉCRASEUR.—RETURN OF THE DISEASE.

There is now under Mr. De Morgan's care in the Middlesex Hospital an old man, from whom a cancerous ulcer of the tip of the tongue was removed about two months ago by the écraseur. The excision involved a portion about the size of the ends of two fingers side by side, and was performed without the loss of more than a very small quantity indeed of blood. The surface merely oozed. The wound healed well, and the man was discharged. About a month after the wound had cicatrised, however, the disease reappeared in the scar. It is not now intended to attempt anything further.

TREATMENT OF NÆVUS BY THE PERCHLORIDE OF IRON.

The perchloride of iron still holds its place as a very useful agent in the treatment of some forms of nævus. Mr. Lawrence in St. Bartholomew's, and Mr. Cock and Mr. Hilton in Guy's, frequently employ it as at first proposed, by means of injection. Used in this way, its chief advantages are in cases in which the growth is too large to be ligatured or excised. Repeated injections of small quantities at a time appears to be the most successful method, as larger ones risk sloughing. There is a case now in the Middlesex Hospital under the care of Mr. De Morgan, in which a nævus of the middle of the upper lip spread rapidly and ulcerated through the lip, leaving a large fissure. In this, by the use of the perchloride, much advantage has been obtained; the disease does not appear to be spreading. The child's condition is now that of a single harelip, both edges being, however, involved in nævoid structure. Mr. Bowman, in two cases recently under his care, in which the nævus was on the eyelid, has employed the perchloride, introduced by a thick ligature of silk. One of these was that of an infant at the Ophthalmic, on whom we saw him operate the other day. The nævus was about the size of a sixpence, and involved the centre of the upper eyelid, being partly cutaneous and partly under the skin. To have tied it would have involved a subsequent eversion of the lid; and it became a problem of much interest to cure it without leaving a scar. The plan adopted was to draw through its centre two large ligature threads previously soaked in the perchloride. To prevent the threads from being squeezed dry in entering the skin, punctures were made in the latter with the point of a knife, and a broad needle was employed. So complete was the coagulating power of the fluid, that the threads came out quite unstained, and not a drop of blood escaped from the punctures. This having been done, a small actual cautery, about the size of a probe, was introduced into the middle of the nævus, and made to burn subcutaneously a little patch in its centre. The seton threads were to be taken out the same evening. It was hoped that the irritation, etc., which must follow these procedures would

destroy the morbid vascularity of the part; and the plan altogether struck us as exceedingly likely to be successful, and at the same time possessing the great advantage of being quite free from risk. Its success it will be for time to determine. With the perchloride, in cases in which the nævus is too large to be safely tied, much patience must be exercised. Many injections will be required, and the shrinking of the vascular tissue will often not be nearly so great at the time as it will become after the lapse of a few months. As exemplifying the dangers of the ligature, we may mention that the writer assisted a fortnight ago in tying a very large nævus on the side of the face in a case in which the infant, healthy at the time, died a week afterwards, and probably from the irritation caused.

SLOUGHING OF OLD CICATRICES DURING AN ILLNESS.

A curious example of the liability of lowly vitalised parts to suffer during accidental impairments of the general health is at present under care in the Middlesex Hospital. A moderately stout and florid woman, aged 58, but looking older, was admitted under the care of Mr. Moore, on account of two large ulcers, one behind each trochanter. She stated that after an attack of fever, at the age of 14, large sores had formed in those situations, which on healing had left thick puckered scars. These never gave her any trouble, except occasioning a little difficulty in walking, and were perfectly sound until quite lately. During an attack of illness, the only symptoms of which had been loss of appetite, achings in various parts, &c. the scars had re-opened, and the present large and unhealthy sores had formed. There did not appear any thing to account for this occurrence other than the hypothesis of poisoned blood. She had been living well, and had up to within a few weeks enjoyed her usual health, which was very good. Under treatment in the Hospital the sores have already much improved, but they are still deep and large, though they do not in either case involve the whole of the cicatrix.

EXPECTED OPERATIONS.

On Saturday (this day), Mr. Stanley has a case of excision of the head of the femur. At King's College, on the same day, Mr. Fergusson has a case of removal of tumour from the thigh, one of operation for prolapsus uteri, and two rectal cases; also a plastic operation on the nose. At the Metropolitan Free, on Monday, Mr. Hutchinson has a case of cancer of the breast and axillary glands; one of Wutzer's operation for the radical cure of hernia; one for hæmorrhoids, and one for entropion.

THE PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

STATISTICAL REPORT OF THE PRINCIPAL OPERATIONS PERFORMED DURING THE LAST SIX MONTHS OF 1856.

(Continued from page 264.)

THE subjoined Report comprises the following Hospitals:—Addenbrooke's (Cambridge), the Birmingham (Queen's), the Berks Royal (Reading), the Cheltenham General, the Cumberland (Carlisle), the Derby General, the Dorset County (Dorchester), the Dundee Royal Infirmary, the Durham County, the Gloucester, the Hitchin General, the Hull, the Leeds, the Leicester General, the Liverpool Royal, the Liverpool Southern and Toxteth, the Margate Sea-bathing Infirmary, the Nottingham General, the Sheffield General, the North Staffordshire (Etruria), the South Staffordshire (Wolverhampton), the Staffordshire General (Stafford), the Sussex County (Brighton), the West Norfolk and Lynn (Lynn), and the York County Hospital.

HERNIOTOMY.

Number of cases, 28; recovered, 19; died, 9.

Case 1.—The Leeds: Mr. Hey.—A delicate woman, aged 27. Hernia femoral; small, strangulated twenty-four hours. It was easily reduced by taxis, but the symptoms continued. The sac was accordingly laid bare and opened. It proved to be empty, excepting a small portion of adherent omentum.

The latter was cut away. All the symptoms ceased, and she made a good recovery. *Case 2.*—The Leeds: Mr. Smith.—A man, aged 45; hernia inguinal, the size of a hen's egg; strangulated several hours. The sac was opened. He was very ill for a day or two, but afterwards recovered. *Case 3.*—The Derby: Mr. Gisborne.—A healthy woman, aged 32. Hernia femoral; strangulated three days; sac opened. The bowels acted on the second day, and there was feculent discharge from the wound on the fifth, which continued until the thirty-first. Recovery. *Case 4.*—The Derby: Mr. Gisborne.—A feeble woman, aged 58. Hernia femoral, strangulated four days. Sac opened. Recovered without a bad symptom. *Case 5.*—The Liverpool Royal: Mr. Stubbs.—A healthy lad, aged 16, while straining in the closet, suddenly felt severe pain in the right groin, and noticed a swelling. He came at once to the Hospital, and it was then found that the right testis was not descended, and that there was an elastic swelling in the right inguinal canal. There was much pain and vomiting. The taxis not being practicable, the operation was performed within a few hours of the descent. The sac was opened, and a knuckle of healthy intestine found, having the testis behind it. The gut was returned, and the testis left *in situ*. He was well in a few days. *Case 6.*—The Liverpool Royal: Mr. Long.—A healthy man, aged 26, was admitted, suffering severely from all the symptoms of strangulated hernia. His history was, that an inguinal rupture, to which he had for a year been liable, had come down two days ago, and been strangulated, and after severe symptoms had been reduced by a Surgeon. The symptoms had persisted. The inguinal canal was free, but the finger, passed up it, discovered above the internal ring a small rounded hard lump. The operation was performed, and the sac opened. The sac was found much thickened, and just within its neck was a small knuckle of intestine covered with recent lymph. Reduction. Recovery. *Case 7.*—The Derby: Mr. Fearn.—A man, aged 51. Hernia inguinal, of large size, and strangulated three days. The sac was opened, and behind a large piece of omentum was found a coil of very dark-coloured gut. Reduction. On the second day the bowels acted; on the sixth a portion of omentum was cut away; on the seventh, there were signs of peritonitis; on the fifteenth, fecal discharge from the wound occurred. The false anus closed on the sixty-second day, and the man recovered well. *Case 8.*—The Leeds: Mr. Smith.—A man, aged 50. Hernia left inguinal, of large size, and strangulated seven days. The sac was opened, and found to contain bowel. He was in extreme danger for some hours after the operation, but eventually rallied and recovered well. *Case 9.*—The Leeds: Mr. Smith.—A man, aged 50. Hernia inguinal, large, strangulated twenty-one hours. Sac opened. The gut was reduced, and a mass of omentum left *in situ*. He was very ill for four days, but eventually recovered well. *Case 10.*—The Nottingham: Mr. Eddison.—A woman, aged 28. Hernia inguinal, strangulated three days; sac opened. Recovered. *Case 11.*—The Nottingham: Mr. Eddison.—A woman, aged 61. Hernia femoral, strangulated five days. Sac opened. Recovered. *Case 12.*—The Bradford: Mr. Meade.—A woman, aged 38. Hernia inguinal, strangulated twenty-four hours; sac opened. Good recovery. *Case 13.*—Addenbrooke's (Cambridge): Mr. Humphrey.—A healthy man, aged 66. Hernia femoral, small and tense, strangulated forty-eight hours; sac opened. An enlarged gland infiltrated with blood lay over the neck of the sac, and caused some difficulty in the operation. Recovery was retarded by bronchitis, but was at length complete. *Case 14.*—The Leicester: Mr. Macaulay.—A healthy man, aged 35. Hernia inguinal, as large as a child's head, strangulated forty-eight hours. The sac was opened, it was unusually thick, contained much serum, a large mass of omentum, and a coil of congested bowel. Recovery was retarded by suppuration of the sac and adherent omentum. Recovered. *Case 15.*—The Gloucester: Mr. Wilton.—A man, aged 21. Hernia inguinal, strangulated fifty-three hours; sac opened. Some adhesions having been broken down, the intestine was returned without division of the neck of the sac. Recovery. *Case 16.*—The Gloucester: Mr. Wood.—A labourer, aged 47. Hernia inguinal, strangulated fifty-nine hours; sac opened. The gut had been forced between the layers of abdominal muscles. Recovered. (For more details, see *Medical Times and Gazette* for December 20, 1856.) *Case 17.*—The Bradford: Mr. Meade.—A woman, aged 45. Hernia femoral, of small size, strangulated twenty-four hours; sac not opened. A portion,

probably of adherent omentum, allowed to remain in the sac. Recovery. *Case 18.*—The Liverpool Southern, and Toxteth: Mr. Minshall.—A man, aged 54. Hernia scrotal, large, strangulated nineteen hours; sac opened. Recovered. *Case 19.*—The Staffordshire General: Dr. Masfern.—A woman, aged 50. Hernia femoral, large, strangulated fourteen hours; sac opened. Recovered well. *Case 20.*—A woman, aged 70. Hernia femoral, of large size, strangulated forty hours; symptoms very urgent. The sac was opened, and the gut found much congested, with a superficial ulceration on its surface. Reduction. Collapse followed, and death next day. At the autopsy there was found extensive peritonitis, with gangrene and perforation of the gut. *Case 21.*—A man, aged 45. Hernia inguinal, strangulated six days. An attempt was made to reduce without opening the sac, but it was not successful. The sac was opened, and a knuckle of bowel very much congested exposed. In the attempt to return, although made most carefully, the bowel gave way. The stricture having been freely divided, the burst gut was left *in situ*. Death seven hours after the operation. At the autopsy extensive adhesions were found, and for a length about three inches above and below the seat of stricture the gut was almost gangrenous. *Case 22.*—A healthy man, aged 55, the subject of a reducible scrotal hernia, for which he had never worn a truss. Two days before admission he had, whilst drunk and quarrelling, received a kick of the scrotum, since which the hernia had been painful, and he had been unable to return it. The symptoms were not so severe as to warrant an operation at the time, but as they continued, and as the most persevering attempts at taxis were ineffectual, it became necessary, on the fourth day from admission and the sixth from the accident. The tumour was as large as a child's head: the sac was opened and was found to contain no serum. Death from peritonitis on the second day. *Case 23.*—A woman, aged 44. Hernia femoral, strangulated twenty-four hours; sac opened. All symptoms referable to the hernia ceased after the operation; but she died on the sixth day of bronchitis, from an acute attack of which she was suffering at the time of admission. *Case 24.*—A woman, aged 60. Hernia femoral, strangulated three days; sac opened. A knuckle of gut was returned, and a portion of omentum cut away: opium treatment. Sudden diarrhoea occurred twenty-four hours after the operation, and the patient sank six hours later. No autopsy. *Case 25.*—A woman, aged 69; hernia femoral, small, strangulated twenty hours; remarkable depression existed. The intestine was found flaccid and perforated, and the sac contained fecal matter. Death in eight hours. No autopsy. *Case 26.*—A woman, aged 58. Hernia femoral, strangulated five days: she was much collapsed. The sac was opened, and was found to contain only adherent omentum; it could not be returned, but the stricture was freely divided. Death from exhaustion on the sixth day. At the autopsy a portion of gut was found just within the abdomen, which had, evidently at one time, been girt in the stricture; it was however quite free. *Case 27.*—A healthy seaman, aged 17. Hernia scrotal, large, strangulated several hours; sac opened, and the intestine, which was healthy, returned. Peritonitis came on on the third day, and death followed on the fifth. *Case 28.*—A man, aged 76. Hernia inguinal, strangulated sixteen hours; sac opened. The man was much prostrated at the time of operation. Death in collapse twenty-four hours afterwards. No autopsy.

EXCISION OF JOINTS.

Case 1.—The Bradford: Mr. Meade.—A strumous girl, aged 17, in tolerable health, the subject of disease of the knee-joint of six years' standing. A curved incision was made in front of the joint, the flap including the patella. The joint being opened the disease was found to be limited to the external condyle of the femur, and the under surface of the patella. A thin slice from each of these was sawn away, and the joint not further disturbed. The patient experienced great relief from pain from the operation, and was doing well at the time of the report.

Case 2.—Addenbrooke's: Mr. Humphrey.—An unhealthy-looking man, aged 20, admitted in July with disease of the knee-joint of three years' standing. He was thin, and much reduced by continued suffering. Excision was performed on the 18th. The ends of the tibia and femur were sawn away, and the patella was removed. As much also of the diseased synovial membrane as was possible was taken away. Profuse suppuration followed; only partial union between the bones took place, and suppuration continued to such an ex-

tent as to endanger life. Under these circumstances amputation was performed on November 4, and the lad recovered rapidly.

Case 3.—The Bradford: Mr. Terry.—A woman, aged 25, of strumous temperament, but not much enfeebled, the subject of scrofulous disease of the right knee-joint for nearly five years. Mr. Terry excised the joint by the usual semilunar incision; the patella was removed, and the articular surfaces of the tibia and femur sawed away. Doing well at the time of report.

Case 4.—The Royal Berks (Reading).—A large heavy man, aged 39, the subject of chronic disease of the knee-joint. On May 15 the joint was excised by the H-shaped incision. Part of patella was removed, and the articular surfaces of the tibia and femur. Several diseased spots were also gouged out. Profuse suppuration followed, and the man's health gave way; six weeks after the operation the parts about the joint were still much swollen, no ankylosis had occurred, and there was still profuse suppuration. The man was very low, and evidently sinking. Amputation through the thigh was now performed, and six weeks afterwards he left in good health, and with a sound stump. On examining the parts after removal much effusion of fibrine was found, and the ends of the bones were pretty nearly covered. There was no ankylosis, and no caries.

Case 5.—Addenbrooke's: Mr. Humphrey.—A thin pale man, aged 29, in much impaired health, the subject of disease of the knee-joint of three years' standing. He was admitted in May, in order to have the limb amputated; but after two months' treatment his health had improved sufficiently to admit of excision. It was performed on July 18, the crucial incision being adopted. The patella was removed, and the ends of the tibia and femur sawn away. A deep ulcer in the head of the tibia was found. Considerable suppuration in the thigh and leg followed, and counter openings were required. Under treatment.

Case 6.—The Leeds: Mr. Hey.—A healthy woman, aged 36, the subject of disease of the knee-joint, the result of a kick from a cow, received three years before. Excision of the joint by the semilunar incision. The bones, where cut, appeared sound. The patient did remarkably well, and the wound united by the first intention for three-fourths of its extent. Recovery was afterwards retarded by abscesses about the parts. At the time of report there was some bony union, but the limb was not quite firm.

Case 7.—The Liverpool Royal: Mr. Stubbs.—A delicate-looking woman, aged 48. Admitted with disease of the shoulder-joint, of four months' duration. There were several sinuses, one of which led into the axilla. After preparatory treatment, to improve her health, excision of the head of the humerus was performed. A V-shaped incision was adopted. The glenoid cavity, which was carious, was freely scraped. Profuse suppuration followed, and for some days the patient was in a critical state; she subsequently, however, rallied, and at the time of report was progressing most favourably.

Case 8.—The Liverpool Royal: Mr. Stubbs.—An unhealthy-looking lad, aged 18, for four years the subject of diseased elbow-joint. There were several cicatrices of strumous ulcers in the neck. The sinuses around the joint discharged a thin and very fetid pus. Excision of the joint was performed on December 23, the H-shaped incision being adopted. The articular extremities of the bones were extensively diseased, and larger portions than usual had to be removed. The patient rapidly recovered after the operation. Passive motion was commenced on the twelfth day, and at the time of report he was almost well.

Case 9.—The York: Mr. Husband.—A boy, aged 8, the subject of diseased elbow-joint. The joint was opened, with a view to resection; but the outer condyle of the humerus only was removed, the other parts being sound. He recovered well, but with a joint that was almost stiff. (See *Medical Times and Gazette* for January 3, 1857, page 10.)

Case 10.—The North Staffordshire: Mr. Garner.—A healthy lad, aged 12, the subject of diseased elbow-joint. Excision of the articulation was performed in the usual way, and the case did well. Thirteen weeks afterwards the wound was all but healed. He had slight motion at the joint, and perfect use of the hand, and could lift a light weight.

Case 11.—The Nottingham: Mr. Thomas Wright.—A woman, aged 21, for three years the subject of carious disease

of the elbow-joint. Excision of the joint was performed in the usual way, and the patient recovered well.

Case 12.—The Liverpool Royal: Mr. Bickersteth.—A healthy woman, aged 24, for three years the subject of disease of the right elbow-joint. The elbow was much swollen, and several sinuses led into the joint. The H-shaped incision was practised, and the ends of the three bones sawn away. Passive motion was commenced on the 8th day. The patient made a good recovery, and has a very useful arm.

Case 13.—The Bradford: Mr. Meade.—A boy, aged 12, the subject of strumous disease of the left elbow-joint, originating in a blow a year ago. Excision of the ends of the three bones was practised, the T-shaped incision being adopted. He recovered well, and had considerable power of flexion and extension.

Case 14.—The Bradford: Mr. Meade.—A strumous lad, aged 16, the subject for one year of disease of the elbow-joint. Excision of the articulation, the crucial incision being adopted. The recovery was slow, but ultimately perfect, and with a fair degree of motion.

Case 15.—The Derby: Mr. Fearn.—A stout, well-nourished woman, aged 28, the subject of carious disease of the wrist of many years' standing. The extremity of the ulna, and four of the carpal bones were removed by an incision on the inner side of the joint. The hand was afterwards kept on a splint, and the case did well. Some motion was obtained.

Case 16.—The Liverpool Royal: Mr. Long.—A delicate-looking girl, aged 22, for three years the subject of diseased os calcis. On June 17 Mr. Long removed some dead bone on each side of the calcis. The incisions did not completely heal, and dead bone could still be felt. On August 19 Mr. Long cut down, and with the saw removed the posterior half of the bone, which when cut appeared quite healthy. The patient afterwards went into the country, and returned much improved in general health. There are, however, some sinuses still unhealed.

Case 17.—The Cheltenham: Dr. Eves.—A delicate girl, aged 14, the subject of carious disease of the fibula. The lower extremity of the bone was cut away. Under treatment.

OPERATIONS FOR CARIES IN BONE.

Case 1.—The Brighton: Mr. Lowdell.—A feeble woman, aged 28, the subject of carious bone in the head of the tibia. Some small portions of dead bone were removed. Death from pyæmia at the end of 5 weeks. Secondary deposits were found.

Case 2.—The York: Mr. Hey.—A boy, in fair health, aged 12, was admitted with much swelling over the outer side of the heel, and several sinuses leading to dead bone. The bone was freely laid bare, and the carious part gouged. Great improvement followed, but the sinuses did not quite heal. After five months in the country he was readmitted, and the operation again performed. The part is now quite sound.

Case 3.—The Hull: Dr. Lunn.—A strumous boy, aged 15, the subject of carious disease of the os calcis. The whole bone was removed, it being to a considerable extent necrosed and loose. Perfect recovery with a useful foot resulted.

Case 4.—The Derby: Mr. Johnson.—A lad, aged 19, in poor health, the subject for several years of caries of the os calcis. The diseased part was cut down upon, and portions of the bone removed. The wound healed, but when he left the hospital he was still somewhat lame.

See also "Excision of Joints."

TREPHEINING FOR ABSCESS IN BONE.

A young man, in fair health, was admitted in February under Mr. Teale's care into the Leeds Infirmary, on account of enlargement of the lower end of the tibia. He had suffered most severe pain, which had been aggravated at nights. The trephine was employed, and an abscess cavity opened, which was cleared out by the gouge. Good recovery followed, and the part healed soundly. He was discharged on April 18.

OPERATIONS FOR NECROSED BONE.

Operations for the removal of sequestra from long bones have been performed in 18 cases: of the femur 6, of the tibia 8, of the fibula 1, of the humerus 1, of the scapula 1, of the sternum 1. In one case amputation was subsequently required, the disease being of the femur, and the health of the patient (a woman aged 20) giving way under the profuse suppuration which attended it. A good recovery followed the amputation. In all the other cases the patients are either well or in process

of recovery. A case under the care of Mr. Teale, in the Leeds Infirmary, was of much interest, on account of the symptoms of diseased hip-joint being closely simulated. The patient was a boy, aged 14, in very feeble health, and of strumous constitution. The part having been exposed, a sequestrum was found in the great trochanter, and was removed. He afterwards did well, and on leaving the Hospital only a small sinus remained.

[To be continued.]

NOTES AND QUERIES.

He that questioneth much shall learn much.—Bacon.

No. 195.—PEPSINE.

Can any of your readers inform me of the mode of making the liquid Pepsine, which has lately come into Medical use?

It is prepared in this town, but the form is kept private. I am Dispenser to the under-mentioned Institution, and as we are just now using two or three pints of the fluid weekly, for which I think we are charged rather an extravagant price, I should be glad to be acquainted with the form for its preparation, of such a strength that ʒj. will be sufficient for a dose taken in water.

A reply to the above, in the next edition of your paper, will much oblige. I am, &c. J. L.

General Dispensary, Birmingham, March 1857.

No. 196.—TOBACCO QUERIES.

"Smoking a secret delight, stealing away men's brains."—LORD BACON.

Can your readers inform me whether Quakers, who never smoke, are a prolific class of men? Will statistics show that crime keeps pace with the increased consumption of tobacco, owing no doubt to "smoking leading to drinking?"

March 16, 1857. I am, &c. ECCE HOMO.

ANSWERS.

No. 192.—ODOUR OF PLANTS.

"Cæsariensis" will find a chapter on the "Odours of Flowers" in Professor Balfour's Class-Book of Botany. Edinburgh: A. and C. Black. 1854. P. 545.

February 28, 1857. I am, &c. W. L. L.

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Medical Times & Gazette.

SATURDAY, MARCH 21.

DEATH IN THE PIPE.

BLUMENBACH was once asked his opinion of phrenology. He said, "There is much in it that is new and much that is true; but what is true is not new, and what is new is not true." A very similar judgment might be passed with great justice upon the recent lucubrations of certain writers on what is called "THE GREAT TOBACCO QUESTION,"—originators of an agitation which though well meant is unreasonable; like all other attempts to frighten people from the moderate use of any stimulant or luxury by frightful pictures, or rather by overdrawn caricatures, of the effects of immoderate abuse.

In glancing at the most salient points of this discussion, we

may notice first that which is true but not new.—It is quite true and perfectly well known to every Medical man, but not sufficiently so perhaps to the public, that tobacco contains a poisonous alkaloid and an empyreumatic oil almost equally poisonous; that smoking in moderation is accompanied by some of the characteristic effects of these poisons until the susceptibility of the system is exhausted by habit; that smoking in excess is followed by a well-marked train of symptoms dependent on diminished mental energy and bodily vigour, owing to the action of tobacco on the nervous system, on the heart and lungs, and on the digestive organs; and that effects similar in kind but varying in degree attend the inordinate habit of snuff-taking, or tobacco chewing. All this is true. It has been well known for a long time. It is not new. It would also probably be very generally admitted that smoking is a useless, expensive, self-indulgent habit; very often an excuse for idleness; nauseating to others if indulged within doors, and often making the smoker personally disagreeable to two of the senses of his acquaintance, by tainting his breath and staining his teeth. Very few would dissent from the decision that snuff-taking is a dirty, and chewing a disgusting, habit; and very many might be found to approve the Counterblast of King James so far as to characterise the habit of using tobacco in any form as "loathsome to the eye, hateful to the nose (of the non-smoker), harmful to the brain, dangerous to the lungs." But these opinions are not new. They have had their advocates ever since the days of James.

Then comes the next phase of the question—the new counterblast, sounded first in the northern regions by Mr. Lizars. We need hardly refer to the views of this gentleman as promulgated in the six editions of his well-known pamphlet; our object is to deal with his new school of London followers.

During the last ten or fifteen years a great increase in the habit of smoking is said to have taken place in this country, and we are told by Mr. Solly, the first of Mr. Lizars' London followers, that if this habit advances, "the English character will lose that combination of energy and solidity which has hitherto distinguished it, and that England will sink in the scale of nations." The Turks are dying out, they smoke enormously, therefore tobacco is a cause of impotence. Polygamy is, of course, a trifle quite beyond the question. The Germans smoke a great deal, there are a great many insane Germans, therefore tobacco is a cause of insanity. In England many insane persons have been smokers. *Raison de plus.* Of course it is quite irrelevant to state that there are a great many more female than male lunatics, and that smoking is very rare among English females. There is a great deal of frivolity and "light undignified reading" just now, and an "alarming passion for fraudulently obtaining and squandering money." This propensity Mr. Taylor does not hesitate to ascribe to "the immoderate use of tobacco." There are a great many bald-headed men in England. Dr. Garrett has often traced baldness to smoking, and one of his smoking patients had such a distressing pain in the "right centre of the occipital bone," that "in an hour he actually rubbed all the hair off that part of his head." Our preachers are not so effective as they used to be. One clergyman, it is admitted, writes brilliant, elegant sermons under the influence of tobacco smoke; but, says Mr. Solly, "the end of that man is not yet come." Whether tobacco narcotises preacher or hearer, however, we are told that it renders "comparatively useless the best endeavours of ministers of religion." Mr. Solly finds that in habitual smokers the fauces are always "more or less injected and rough, presenting the appearance of a piece of dirty red velvet." He conceives that this is not a mere local congestion, but that "it exists, more or less, in the stomach and the rest of the alimentary canal. He

quotes Mr. Whitfield, who says that "he has seen three cases of delirium tremens induced by tobacco-smoke alone." He says that during one week lately he was "consulted by three young men suffering from seminal weakness, in all of whom I could trace this drain to the relaxing, *innervating* effect of smoking." After a gentle hint to young men that "all such cases," of which he has seen many of late years, are curable—he promises facts from his Hospital practice, proving the ill effects of smoking, "when I have had a record kept of its effects in my hospital cases," no record having, apparently, been kept as yet. In private he says he has seen "many cases of amaurosis caused by smoking." He knew an "old dresser," "whose health improved after giving up smoking and going to Brighton for change of air;" and a "valued servant," who, after he had abandoned smoking, was "an altered man." These are really all the facts—and such facts!—in two of the most wild, illogical, irrational letters we ever read upon any Medical question. But if facts are wanting, assertions and suppositions are not. Mr. Solly says, "In the habitual smoker the heart is irritable and the person nervous, the pulse frequently intermittent, and irregular in force and frequency." Had he said, in "some habitual smokers" this statement would have been correct, but everybody knows habitual smokers who are by no means nervous or irritable, and whose pulse is normal. Because Lord Raglan, who smoked in early life, is said not to have smoked in the Crimea, Mr. Solly supposes this is a "tacit acknowledgment that smoking interferes, more or less, with that high intellectual activity which is required in high positions." It would be just as logical to argue, that, as Lord Raglan did not die of cholera while he was a smoker, he would have been alive now if he had not given up his cigar. Logicians of the Solly school might say triumphantly, "Lord Raglan went through two epidemics of cholera in England while he was a smoker, and escaped. He went to the Crimea, gave up smoking, and when cholera came he died. Is not this a tacit acknowledgment that smoking interferes more or less with that high intestinal activity which is required in a high degree of cholera?" But, perhaps, the most amusing specimen of this style of reasoning is the reply to the argument that a "certain personage" smokes without detriment. "Oh," says Mr. Solly, "God grant that it may not shorten his valuable life, and impair his nervous system!" This is only to be equalled by the astounding expression of belief, that "all our greatest men, I mean intellectually—statesmen, lawyers, warriors, physicians, and surgeons—have either not been smokers, or if smokers, that they have died prematurely." Mr. Solly's physiology is as questionable as his biography. Nicotine is a poison, so is the empyreumatic oil of tobacco, and "tobacco can poison by its smoke through the lungs;" every smoker knowing that the smoke does not pass into the lungs. "The blood really is poisoned by tobacco," says another writer, "for leeches drop off dead directly they are applied to smokers, and fleas and bugs, whose bites on the children were as thick as measles, rarely, if ever, attack the smoking parent." Here at last is something new; but is it true? We might repeat the same question upon every one of the startling assertions of Mr. Solly and his school. They may be new, but are they true?

Taking a general view of the discussion in the pages of a contemporary, who devotes a considerable space weekly to the affairs of tobaccoists and coffee-shops, bakers and grocers, oilmen and pastrycooks—and admitting the purpose of the principal champions to be good—still the manner in which they seek to attain their object is blameable. Instead of arguing the question in a calm, philosophical spirit, their letters teem with denunciations based on facts for which they are indebted almost entirely to their own fertile imaginations. The effects of moderate use and immoderate

abuse are jumbled together, and, if the conclusions drawn from this style of argument were carried out, we should have to abolish the use of every remedy which, when incautiously used, had caused death. Opium, chloroform, digitalis must fall with tobacco. Such reasoning will not do in the present day. We must have facts,—real, thoroughly-established facts,—to prove that the use of tobacco in moderation is injurious, before we can expect to abolish a luxury sanctioned by time and almost universal custom in varied climates and among the most diverse races. When such facts are brought forward it will be time to join in the new crusade. In the present state of the question we must put aside all that is new as not true, and, taking only what is true, maintain the doctrines long held by every man of common sense and habit of observation, regretting that the tone of Medical literature has been lowered in the recent discussion by filling pages which should be devoted to serious argument addressed to the Profession, with agitating addresses to the Public.

THE WEEK.

At the Lynn County Court, a few days ago, an action was brought against a coal-dealer for compensation for injuries inflicted by his cart upon a child aged four years. The only point of the case which presents any interest to the Medical Profession is the conflicting evidence of the medical witnesses as to the nature of the injury sustained by the child; one party maintaining that there was a fracture of the clavicle, and the other asserting that no fracture had ever existed. The child was produced in court, and was freely examined by the medical witnesses on both sides, but they both stoutly maintained their own views. When we state, however, that the chief medical (:) witness who deposed to the fracture, was a *bone-setter*, and that he was supported in his opinion by two homœopaths; and that, on the other hand, five gentlemen of established reputation in the legitimate practice of surgery and medicine declared that they had examined the child at the time of the accident and often on subsequent occasions, and that no fracture had ever taken place, we can have no doubt as to the real nature of the case. Among the five medical gentlemen who deposed to the absence of fracture were the senior surgeon to the West Norfolk and Lynn Hospital; formerly Curator of the Anatomical Museum of St. George's Hospital; and the Physician and the House-Surgeon to the Lynn Hospital. We should have imagined that the evidence of such gentlemen would have entirely outweighed the opinions of an ignorant bone-setter, even although this worthy was supported by two homœopaths; but we find that the County Court Judge in his summing up placed the legitimate and the illegitimate practitioners upon the same footing as regarded the reception of their opinions, and he even went so far as to speak of the bone-setter in the most complimentary terms. "This bone-setter," said the judge, "seemed to have some good character for his skill in setting bones, and *although he had not the usual qualification of a surgeon*, was no doubt a person of considerable experience. He (the judge) had often heard of men who were called bone-setters who showed very great skill, and he thought it very likely *this gentleman* might be one of the number." Now, among "the usual qualifications of a surgeon" is, we presume, some knowledge of surgery, without which, we humbly submit to this most learned judge, a man cannot distinguish a fracture at all; and there is no evidence that this bone-setter, who is so highly eulogised, possessed any such knowledge. Our own opinion of bone-setters is, that they often pretend to discover fractures where none exist, and obtain the credit of curing cases in which no treatment at all is required; while, on the other hand, as our Law Reports abundantly testify, they almost invariably leave a real case of

fracture much worse than they found it, and cause a permanent disability to the patient. Suppose a person were to come forward to plead a cause in the court of this same judge, without possessing the legal qualification to practise as a barrister or a solicitor, would the same high authority pronounce his judgment, that "although" the *soi-disant* barrister "did not possess the usual qualifications of an advocate, yet, as he (the judge) had heard that many persons who were not barristers possessed as much or more ability than those who were, the pretender would be allowed to practise in the courts of law." We are quite aware that such nonsense never was, and never could be uttered from the judicial bench; but the mock lawyer could, even if successful, only rob his victim of his money; while the Medical impostor pretends to the science which he does not possess, and fleeces his dupes not only of their money, but of their health, their limbs, and their lives into the bargain!

The Guardians of the West Derby Union have just gained for themselves a notoriety as unenviable as that which has fallen to the lot of so many other local Boards, entrusted with the management of the Sick Poor. It appears that the Workhouse of this Union has become a large Hospital, and that out of 691 inmates, no less than 251 are in the sick wards. Notwithstanding the additions to the existing accommodation which have been made from time to time, the available space is so limited that it has repeatedly happened that one sick man has been obliged to wait for another to die before he could have a bed, and the mortality has occasionally been so high that seven corpses have been lying in the dead-house at the same time, waiting for interment. To attend upon this enormous mass of sickness and infirmity, *one* Medical man only has been appointed; and that gentleman, Dr. Birkbeck Nevins, finding that the duties of the office far exceeded his powers, applied to the Board for a properly-qualified Medical assistant, which request was granted by the appointment of an assistant for *one month*. At the expiration of that period, although the number of sick had considerably increased, the Board decided that the services of the assistant should not be continued, one of the Guardians declaring that "he was determined there should never be a second Medical man in the Workhouse as long as he lived." But the necessity for assistance became so obvious, that the Visiting Committee of the Board recommended the appointment of a second Medical man; but the Guardians again refused the necessary aid. They, however, granted a Dispenser to compound the medicines, but they fettered the proposed appointment with the condition that the fortunate applicant was to be subject to dismissal at a month's notice. The consequence has been that not even a druggist's apprentice could be found to accept the situation. We are indeed told that, from personal regard to Dr. Nevins, one person did undertake the duty, but he threw it up at the end of *the first day's trial*! Thus Dr. Nevins is left alone with the charge of attending to 250 patients, being compelled, besides, to dispense all the medicines, to superintend all the hygienic details of the Workhouse, and to make weekly returns of the dietary, and all for the sum, as we are informed, of £120 per annum. But the Guardians of this Union do not, as in some other instances, veil their extravagant absurdities with the pretext of consulting the public good, or even of saving the parish rates, but they boldly and openly announce that their object is to drive Dr. Nevins from his office. We are assured, on the authority of a respectable Liverpool newspaper (and without such authority we certainly should have disbelieved the statement), that one of the Guardians not only desired the resignation or dismissal of Dr. Nevins, but assigned his reasons, which were, that Dr. Nevins "was too experienced—too high

in his Profession—too old," (we believe that the Doctor is under forty,) and that "a young man just beginning business, whose services might be determined at a month's notice, was the person best fitted for a Workhouse like theirs." Comment upon the conduct of the West Derby Guardians or upon the reasons which they assign for it is quite superfluous, and we commend the consideration of the little history we have just related to the Poor-law Medical Reform Association, and to the members of the two Houses of Parliament.

We are glad to see that Lord Raynham, in the House of Commons on Monday night, moved an address for a return of the number of persons convicted of infanticide during the years 1852 to 1856, inclusive, together with the sentence passed upon each person so convicted; specifying whether such sentence has been modified or reversed, and specifying, also, whether the verdict given at the trial of each person has been accompanied by a recommendation to mercy; and, if so, the reason or reasons, if any, alleged for such recommendations. To show the necessity of some such inquiry we need only remind our readers that the mortality of infants under five years of age in England is 40·7 per cent. of the total deaths; and this varies considerably in different counties: for instance, in London it is 40 per cent.; in Staffordshire, 55 per cent.; and in Warwickshire, 49 per cent.; and it is curious to remark, that with these proportions the illegitimate births in London are 4·01 per cent.; in Stafford, 5·9 per cent.; and in Warwickshire, 5·4 per cent., presenting striking analogy between illegitimacy and infanticide.

Mr. Gamgee brought before the Pathological Society, on Tuesday, a specimen of diseased lung of an ox, and made some remarks of great interest on cattle epidemics and diseased meat, in connexion with the public health. On Monday he inspected the live and slaughtered cattle at the New Cattle Market, Copenhagen-fields. He found one ox emaciated, hide-bound, and with abscesses in various parts of the body, a second feverish, and a third evidently suffering from pleuropneumonia. Among the slaughtered oxen he found two which had apparently had typhus or typhoid. Mr. Gamgee has favoured us with a communication, from which we extract his account of the appearances in a third ox. He says, "The lungs of this beast were infiltrated with solidified plastic matter in almost their whole extent, so that, whereas their average weight should have been about eight pounds, it was twenty-seven pounds. The disease was in its acute stage; and although the carcase had been very skilfully trimmed and dressed, the flesh in the walls of the chest and abdomen bore unmistakeable marks of disease. The slaughterman stated that these carcasses would be conveyed to the City markets, where they would be sold as food. In his opinion these carcasses were not diseased, nor would they be considered such by the City meat inspectors. He even maintained the lungs were not diseased; he said, they only contained congealed healthy blood!! Mr. Gamgee afterwards applied both to the Lord Mayor and a district magistrate for a summons against the slaughterman, but neither of these functionaries considered that they had any jurisdiction in the matter. There can be no doubt that a very large quantity of diseased meat is sold in the London markets, and it is high time that some efficient system of protection to the public should be instituted. The suppression of private slaughter-houses would be the first step; for after a beast has been *trimmed*, as the butchers say, that is, after all suspicious-looking parts have been cut away, no inspector can detect diseased meat in the remainder of the animal. There should be a simultaneous establishment of public slaughter-houses, and a daily inspection of these by competent officers. Mr. Gamgee has informed us that the pleuro-

pneumonia which has been prevailing in cattle-sheds in different parts of the metropolis, is a different disease from the murrain which has been prevailing on the Continent,—this murrain being a contagious typhus, which has not been seen in this country as yet. If this be the case, the importance of the suggestions we made in our last numbers, as to the prevention of importation of diseased cattle, becomes even more manifest.

By the last mail from Australia, we learn that Dr. Palmer, who practised many years ago as a Surgeon in Golden-square, and was well known as editor of Hunter's works, and as one of the Surgeons to the St. George's and St. James's Dispensary, has been elected President of the Legislative Council of the colony of Victoria, in the first session of the first parliament under the new constitution. The Legislative Assembly has also chosen a Medical man as its Speaker, Dr. Murphy. Speaking of Dr. Palmer, the *Times'* correspondent for Melbourne says, he "filled the office of Speaker of the late Council with considerable credit to himself, but with the single drawback of being a little too fond of speaking in committee of the whole. Still, he is a man of considerable intelligence, full of information, and perfectly familiar with his duties. No other man in the Upper House approaches him in fitness, and to have chosen any other would have been a disgrace to the House." We cordially congratulate our brethren in Australia upon the influential position they have obtained.

A delicate question has been raised between Sir John Hall and Dr. Sutherland. Last week in the House of Commons Lord Palmerston said, in his speech on the M'Neill and Tulloch debate, that "the Medical Commission, consisting of Dr. Gavin, Dr. Sutherland, and Mr. Rawlinson, conferred greater advantages on the army than it was possible for Sir John M'Neill and Colonel Tulloch to accomplish; because they took the Medical arrangements of the hospitals and the camp into immediate consideration, and suggested improvements of considerable importance. Therefore, without any disparagement of them, I am bound to say that Dr. Sutherland, Dr. Gavin (who unfortunately died in the Crimea), and Mr. Rawlinson, the engineer, who was wounded in an action into which he had ventured, did, in my opinion, render far more important services to the public and the army than it was in the power of Sir John M'Neill and Colonel Tulloch to confer." Upon this Sir John Hall writes:—"I owe it to my own reputation and position distinctly to state that neither Dr. Sutherland nor any other member of the Sanitary Commission had anything whatever to do with either the organisation or management of the military Hospitals in the Crimea . . . So far as their suggestions on sanitary matters in the Crimea are concerned it was admitted by themselves that almost everything they could think of was either in actual operation, or had been recommended by the Medical Department of the army before their arrival; but, as they were invested by Government with greater power than was conceded to the principal Medical officer of the army, they thought they might assist in getting useful measures carried out." Dr. Sutherland replies "It is quite true, as stated by Dr. Hall, that the commission had nothing whatever to do 'with either the organisation or management of the military Hospitals.' We were, in fact, precluded by our instructions from interfering with these matters. But we were required to see that the sanitary condition of the Hospitals, as to ventilation, drainage, water supply, number of sick, etc., was such as to give fair scope to the Medical treatment. We had also to see to the removal of all sanitary defects in the camps and at Balaklava. The report of the proceedings of the commission

has been for some time in the hands of the printer, and will be published very shortly. It gives all the details of the sanitary work done, both in the Crimea and at the Hospitals on the Bosphorus." Here the matter rests for the present.

REVIEWS.

Clinical Lectures on certain Diseases of the Urinary Organs; and on Dropsies. By ROBERT BENTLEY TODD, M.D. F.R.S. Physician to King's College Hospital. Pp. 435. London: 1857.

THE present volume contains sixteen Lectures, devoted to the subjects of Hæmaturia, Albuminous Urine, Dropsy, and Gout, and the pathological conditions on which these maladies depend. The cases are selected in general from those under treatment at the Hospital; the symptoms are recorded as taken down in the Hospital registers; and the results of treatment, whether favourable or otherwise, are faithfully detailed. In the fatal cases, the post-mortem examinations are described, and the appearances compared with the diagnosis during life.

In his Preface Dr. Todd makes some judicious observations upon the great facilities afforded for clinical teaching in this Metropolis, and the imperfect use which is made in many of our Hospitals of the great advantages offered. The obstacles which exist to the complete development of a system of clinical teaching in our Hospitals are described by Dr. Todd as being due to two causes:—First, to the inconvenient period of the day at which the Hospitals are usually visited, which arrangement interferes with the private practice of the Medical officers; and secondly, to the great number of merely theoretical lectures which students are called upon to attend at the Medical schools, and which swallow up the time which might more advantageously be appropriated to clinical study. Some improvement, however, has lately taken place in this particular, and some of the examining bodies not only insist upon attendance on clinical lectures as an integral part of Medical study, but they have relaxed the attendance upon the theoretical lectures in favour of those of a more practical kind. While agreeing, therefore, with Dr. Todd, that too many theoretical lectures are given to students during their pupilage, we believe that the fault lies not so much with the examining bodies as with the lecturers themselves, who have certainly not carried out the system of clinical instruction as they might have done, considering the means at their disposal. To this censure, however, there are numerous and honourable exceptions in our London schools; and without making invidious distinctions, we may state that Dr. Todd has himself shown a worthy example as a clinical teacher, as his admirable lectures, many of which have been published in our own pages, abundantly testify.

The plan of clinical teaching, consisting, as it does, of a series of disquisitions upon disease as it occurs indiscriminately among the patients of an Hospital, does not usually admit of any rigorous system of classification; nevertheless, by collecting his observations, year after year, Dr. Todd has been enabled to present to his readers something like a consecutive course of lectures upon certain groups of maladies; and while in a former volume he treated of the diseases of the nervous system, in the present he describes some of those which affect the urinary organs.

It is obviously impracticable for us to follow Dr. Todd step by step throughout his lectures, and we shall therefore select such portions of his work as appear to us to be marked by peculiar interest or by novelty.

The diseases of the kidney producing albuminous urine are classed by Dr. Todd under two divisions:—A. Cases in which dropsy is urgent and acute, and the albumen abundant; a division which includes acute dropsy and dropsy after scarlet fever, the pathological cause being an acute enlargement of the kidney; and, B. Cases in which dropsy is not a prominent symptom, is very variable in amount, or may be chronic or absent altogether, and in which the albumen is variable. This division includes chronic enlargement of the kidney, and chronic contraction of the kidney; the former corresponding to the fatty disease and the waxy disease of the kidney, and the latter to chronic nephritis, or chronic wasting of the kidney, and gouty kidney.

It must be observed that the term "Bright's disease" is

limited by Dr. Todd to the condition represented by the large, mottled kidney, the result of the deposition of fatty matter in the epithelium of the uriniferous tubes; while the shrunken, wasted kidney is the characteristic of a totally different affection, described by Dr. Todd under the name of the *gouty kidney*.

The peculiar symptoms and pathological appearances which distinguish the *gouty kidney* from *Bright's disease* are detailed at length in Dr. Todd's twelfth lecture. The former is characterised by the gouty habit of the patient, evinced by the deposition of lithate of soda in various parts of the body; by the existence of more or less dropsy, although this is not a necessary symptom; by the presence of a *small* quantity of albumen in the urine; and by the shrivelled and wasted condition of the kidney as seen after death. This state of the organ is supposed by Dr. Todd to be due to the tainted nutrition of the blood, which conveys to the gland an unhealthy pabulum, incapable of developing its normal tissues.

The subject of gouty inflammation of the bladder is discussed in the fourteenth lecture. This affection is manifested, according to Dr. Todd, in four different ways, viz. 1st, as a distinct inflammatory disease, sometimes accompanied by the secretion of pus from the mucous membrane of the bladder, and by an alkaline condition of the urine. 2nd, By an irritable state of the bladder and incontinence of urine, leading to frequent micturition in small quantities, the urine being pale, acid, without mucus or pus, but occasionally containing albumen. 3rd, By a gouty condition of the muscular coat of the bladder, leading to sudden retention of urine; and, 4th, By a merely painful condition of the bladder, supervening in violent paroxysms after some irregularity in diet. The treatment of gouty inflammation of the bladder, according to Dr. Todd, consists in free counter-irritation, mustard and ammonia being the best counter-irritants. Blisters and turpentine are contra-indicated, as likely to produce irritation of the urinary organs. In order to allay pain, opium should be employed, either rubbed in as a strong opiate liniment over the region of the bladder, or given in the form of enema injected into the rectum.

The last lecture is occupied with the clinical history of asthenic gout. In this form of the disease, lithate of soda is deposited in enormous quantities in the different tissues, and the gouty poison exhibits an erratic tendency, the stomach and bronchial tubes being often attacked. The treatment of this form of disease consists, according to Dr. Todd, in combating the irritability of the stomach by the exhibition of opium, the application of free counter-irritation over the epigastric region by mustard and turpentine, the employment of sesquicarbonate of ammonia, together with chloric ether, and the administration of brandy in small and frequent doses. Dr. Todd does not consider that colchicum has a special power over the poison of gout, although its use has sometimes seemed to be partially successful; and he even believes that in most cases it does more harm than good. The employment of ammonia and brandy in a gouty state of the stomach is apparently so heterodox, as to induce Dr. Todd to appeal to experience as his chief argument; and indeed he admits that upon theoretical grounds the practice cannot be defended. Lemon-juice is considered by Dr. Todd as an excellent diuretic in gout and rheumatism, although without exercising any specific power upon either disease; and he has long been in the habit of employing it as a diuretic in dropsies of all kinds.

Such are some of the most important topics touched upon in the present volume of Dr. Todd's Clinical Lectures. They exhibit throughout the impress of a thoughtful and well-cultivated intellect, and of a mind fully alive to all the resources of the medical art; and although some of Dr. Todd's views, especially those on treatment, will perhaps challenge criticism from his professional brethren, yet as he invites attention to the results of experience, we know of no better test of the soundness of his doctrines. His present volume is calculated to sustain and enhance his reputation as an accomplished practical physician.

THE WILL of Andrew Ure, Esq., M.D., has been proved under £10,000.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON PLUGGING WITH ICE IN AFFECTIONS OF THE UTERUS.

By M. ARAN.

M. ARAN, after stating that the trials he has made of freezing mixtures in cancerous disease of the uterus have not, in consequence of the irritation they eventually give rise to, confirmed Dr. Arnott's statements upon the subject, goes on to describe his own mode of applying ice in certain uterine affections in which he has found it very beneficial. As some very sensitive persons can ill bear the too sudden impression of cold, he at first employs a speculum that is a bad conductor, as of wood, ivory, or gutta percha, filling it with roughly powdered ice or fragments of ice; but after one or two *séances*, he replaces this by a large trivalvular or quadrivalvular metallic speculum, which opening widely at its bottom forms a kind of funnel in which a considerable quantity of ice may be heaped up. He employs one constructed on the model of Jobert's, and opening widely below. The patient is laid upon her back, with her feet firmly supported upon two chairs, and her person protected by oiled skin, which enables the water that escapes to run off. The speculum is gradually filled with ice, and as this begins to melt, it is pushed to the bottom of the speculum and more added, so as to maintain the diminution of temperature. When the *séance* is to be finished, the speculum and the ice may be removed, and an injection of water, at first iced, and then of the temperature of the room, thrown into the vagina; or the speculum should be slowly withdrawn, leaving as much as possible of the ice in the vagina. This last is much to be preferred, but requires some dexterity and practice, to be able to avoid withdrawing the ice with the speculum, or producing a too painful distension of the vagina, while separating the valves. The patient is removed to a bed or sofa, protected from the wet, and the ice in some minutes melts, a far less amount of reaction resulting than when all the ice is withdrawn with the speculum.

The first sensation produced by the cold is one of surprise, especially if a metallic speculum be employed, and in some sensitive persons, pains of the nature of uterine colic are excited. Next, a feeling of cold radiates over the whole abdomen, the patients having the sensation of something cold flowing there, which gradually benumbs all other feeling. After a few seconds, or at most a minute or two, this sensation of internal numbness is so complete, that the woman declares she has no longer any sense of feeling in the abdominal or lumbar regions. This continues until the ice is removed. If this is done at once, and an iced water injection substituted, reaction is exhibited under the form of a gradually increasing warmth, until the abdomen becomes the seat of a sensation of internal burning. But if the ice be left in on withdrawing the speculum, reaction is far less marked, the sensation of internal numbness continuing for 1 or even 5 or 6 hours. It is not a disagreeable feeling, and implies the cessation of the pains on account of which it has been produced. M. Aran has never observed the discolouration and rigidity of the cervix produced which Arnott says are found in the more external parts. To the finger, too, there is only a sensation of freshness imparted, and the thermometer does not sink below 14° C. The refrigeration is thus not carried so far in these deep, as in the more external, parts; and what is of importance in a practical point of view is, that the diminution of temperature does not require to be carried so far in order to relieve pain; a fact in accordance with the well-known obtuse sensibility of the organs of vegetative life, especially of the uterus.

It is especially as a means of modifying sensibility and soothing hyperæsthesia, that this means should be employed. Hypogastric and iliac pains, as also those occurring in the groins and thighs, and especially in the loins, may be suspended by it for hours or days, or even definitively, when the proper cases for its employment are selected. It cannot, however, be used advantageously as a matter of course in all cases in which these pains are present. In some cases it acts more favourably than in others; in some it is of no avail, while in others, where there is great nervous irritability, this is only augmented. Indeed, of all contra-indications, the general increased sensibility met with in some patients during

the course of uterine affections, is the strongest. Besides these unfortunate organizations, in which every means employed proves a rock or a peril, there are others in which we can look for no permanent benefit; viz., those in which the uterine system is either the seat of acute inflammation, or of active congestion that is verging upon it. When any amelioration is derived in such, it is very fleeting, and followed by an aggravation of suffering. Congestion which though active is fleeting, and passive uterine congestion, together with the pains they give rise to, are alleviated in a remarkable manner; and this it is that renders it so valuable a means in subacute or chronic inflammatory affections of the uterus, for combating the congestions which are from time to time produced, and which give rise to a reproduction of old pains temporarily allayed; in the congestions so often met with during the menopause; and especially in those which are of such frequent occurrence after displacements of the uterus. Thus, ice plugging does not of itself constitute a method of treating uterine affections, it being less a means applicable to this or that determinate uterine affection, than a therapeutical agent fitted to fulfil certain indications, principally that of relieving pains dependent upon temporary active congestions, or purely passive congestions of the uterus and neighbouring organs. In some cases of displacement of the uterus, its services have been truly remarkable, an instance of which is given by the author. In uterine hæmorrhage, this means is of very limited use. If this is slight and drawing to a close, the ice may suspend it definitively; but in other cases the reaction which ensues will in a few hours give rise to a reproduction of the bleeding.

The number and duration of the applications, and the intervals separating them, must much depend upon the sensibility of the patient, and the results obtained. At the commencement, the *séances*, as a general rule, should last for 5 or 10 minutes, and afterwards be extended to 15 or 30, always taking care not to prolong them sufficiently to induce fatigue. When possible, they should be repeated daily, and at the same hour. The duration of the treatment must depend upon the effects produced. If there is no amelioration produced by the second or third *séance*, a farther continuance is useless; but if from the beginning a well-marked degree of ease and comfort results, the application may be repeated until the uterine hyperæsthesia has almost entirely disappeared; treating afterwards the co-existent morbid states, such as ulcerations, engorgements, and uterine catarrh. M. Aran has usually found about four or five *séances* to be requisite in favourable cases, eight or ten in more serious cases, and from fifteen to twenty in obstinate ones.—*Bulletin de Thérapeutique*, tome li. pp. 258-268.

ON THE EMPLOYMENT OF COLLODION IN GONORRHOËAL ORCHITIS.

Ry Dr. CAVALERI.

As a small contribution to the disputed question of the amount of benefit derivable from the employment of collodion in the treatment of gonorrhœal orchitis, Dr. Cavaleri furnishes the particulars of fourteen cases treated in the *Ospedale Maggiore* of Milan, by *etherossilina*, or collodion prepared with 1 part of gun-cotton and 18 of sulphuric ether.

A sensation of burning pain was produced in the skin of the scrotum, which continued, with more or less intensity, from three minutes to several hours, according to individual susceptibility. This pain was much more severe, or even insupportable, if the cutis had become detached in part, either from the prior application of cataplasms or plasters, or during the shaving the hairs. A diminution of temperature, sensible to the hand and the thermometer, was produced. A contraction or corrugation of the portion of the scrotum brought into contact with the collodion immediately followed, and gradually increased, augmenting in proportion as desiccation of the collodion took place. The dry and adherent pellicle consequent upon this desiccation either partially or entirely separated in the course of a day or two. To obtain the firm adhesion of the collodion it was found necessary to remove the hairs, the greatest care being taken not to produce even the slightest abrasion of the cuticle, or the application excited the severest suffering. In all these cases the pain and enlargement of the scrotum, as also the attendant fever, diminished within the space of from two to twelve hours, the symptoms of acute phlegmasia ceasing in from one to three days. When the swelling and induration of the testis con-

tinued, it usually being confined to the epididymis, the application was renewed for the second, third, or fourth time. When six or eight days had passed without the testicle having returned to its normal state, it became necessary to resort to the ordinary means of treating chronic orchitis. In six of the cases the application was made but once, in six others twice, in one three times, and in another four times. In nine the orchitis was acute, and in five chronic—the duration of the treatment by this means alone having varied from one to ten days. In two or three of the cases extension of pain to the inguinal region required local bleeding.—*Omodei's Annali Universali*, vol. clvii. pp. 84—94.

EXCERPTA MINORA.

Glycerine and Kreosote in Scarlatina.—Dr. King states that he has used this combination with much satisfaction in several cases. To one ounce of glycerine he adds two drops of creosote, and rubs the mixture over the entire surface, except the face and scalp, night and morning, previously sponging the body well with warm water.—*Boston Journal*, vol. lv. p. 435.

Tannin in Falling-off of the Hair.—Dr. Lintner, alluding to Dr. Landerer's recommendation of the employment of tannin as a remedy for falling-off of the hair, states that he has employed a somewhat similar formula with repeated success. Pure tannin gr. i., spt. saponis (a solution of Castille soap in spirit), ʒvi. This is well rubbed into the head every evening, some pure grease being applied in the morning. When the hair has ceased falling off the application may be continued once or twice a week.—*Buchner's Repertor.*, 1856, No. 12.

FOREIGN CORRESPONDENCE.

FRANCE.

[From our Paris Correspondent.]

PARIS, March 15, 1857.

I need not tell you much about the discussion on Subcutaneous Surgery at the Academy, as you will see the full particulars in our Medical Journals, and will, no doubt, make such an abstract of it as you think likely to interest your readers. Malgaigne's speech, however, has led to a philosophical letter from Dr. Pidoux, which has considerable merit. The Doctor is one of our first Medical writers, and he has written one of his best letters on Descartes and Bacon, and their principles of scientific investigation.

Malgaigne has met at last with a champion as full of wit and bitterness as himself. Dr. Pidoux is capital on the Medical logic of some academicians. He says, "To their eyes all the causes of morbid phenomena are external ones. To admit that atmospheric air excites the suppuration of wounds, they require that suppuration be produced in every case. There are suppurative inflammations (puerperal peritonitis, etc.) independent of the contact of air, on that account air does not produce the suppuration of wounds. There are vomitings without tartar-emetic, then that substance is not an emetic. . . Every cause must be seen; those which cannot be seen are words, hypotheses, Cartesian dreams. They seek always the causes in the effects, the reason of things in the things themselves. To go beyond, is, to them, to violate the rules of true induction. Such a mode of reasoning," writes Dr. Pidoux, "is the true way to invent nothing, to contradict everything, and to find fault with everything—useless art, of which Bacon has said, 'Ad garriendum prompta; ad generandum autem immatura atque invalida.'"

Dr. Buttura, librarian to the Imperial School of Military Medicine, has put forth an important essay upon exanthematic fevers without eruption, and peculiarly upon scarlatina without rash (a):—The greater part of the French Physicians are not acquainted with the facts that have proved the existence of a specific morbid poisoning in many cases of rubeola, variola, scarlatina, corysipelas, etc. when the skin presents no symptoms of eruption. It is only a few years since, and by the influence of the lectures of Dr. Trousseau, that a peculiar sore throat is found to be a form of scarlatina. Dr. Buttura has given a learned account of that question; he has brought together a great number of facts, forgotten in the works of the French Physicians since the beginning of the century; he has related several curious cases of his own

observation, and has framed in that manner a most interesting, and quite demonstrative memoir.

In the *Medical Gazette of Algeria*, a journal which promises to give interesting notices of the diseases of French Africa, I find a good account of the frequency of furunculoid eruptions and whitlows in Algeria. Dr. Douchez has observed a great number of boils and whitlows in 1855. He tries to explain the disease by external causes,—the hot season, the malaria; but the facts prove, as several observers have seen it,—Ravaton in the past century, and latterly, Martin in France, and Professor Laycock in England—that the boils and whitlows are sometimes epidemic, and developed by a specific and quite unknown cause.

The Association of Physicians of Paris has held its twenty-third annual meeting. Baron Paul Dubois was the Chairman, and Drs. Cabanellas and Perdrin the speakers. The income of the Society for last year was about £1360.

GENERAL CORRESPONDENCE.

VICHY WATERS AND SALTS IN THE TREATMENT OF DIABETES.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the short account of my third Gulstonian Lecture given in your impression of the 7th inst., I noticed a slight inaccuracy, which I think it would be desirable to correct. I did not state that the Vichy waters as imported into this country contained only the bicarbonate of soda, but that the so-called Vichy salts, sold both in London and Paris, and employed in the form of lozenges or pastiles, or used as an addition to baths, consisted simply of this salt. The mode of manufacturing these salts at Vichy, which I had an opportunity of witnessing last summer, is such as to separate all the other constituents existing in the waters; and hence they can produce no further effect than the ordinary bicarbonate of soda. I have every reason to believe that the waters from the different sources at or near Vichy are exported in all their integrity, saving that some of the iron contained in them from the "Source des Dames," "Source de Lardy," and "Source d'Hauterive" is apt to become deposited.

I am, &c.

A. B. GARROD, M.D.

84, Harley-street, Cavendish-square, March 17th, 1857.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. PRESIDENTS FROM 1518 TO 1857.

[To the Editor of the Medical Times and Gazette.]

SIR,—A complete series of the Presidents of the Royal College of Physicians, from the foundation of that learned body by King Henry VIII. to the present time, has long been a desideratum to those interested in the history of the progress of medicine in this country. No such list has ever been published, and I believe I am correct in stating that no attempt has heretofore been made to compile one from official records.

Having had occasion, in the preparation of the Roll of the College (a MS. now in the library), to institute a careful search of the Annals from 1518 to the present time, I avail myself of the opportunity now afforded to place on record, in the pages of the *Medical Times and Gazette*, an authentic list of the Presidents of the College, compiled from the Annals, and verified by other documents among the archives.

WILLIAM MUNK, M.D.

Finsbury-place, March 5, 1857.

1. 1518-24. Thomas Linacre, M.D., Patav. incorp. Oxon. Obiit 20 Oct. 1524.

The Founder and first President of the College. 1525. Uncertain.

2. 1526. Thomas Bentley, M.D. Oxon. (?), 1518.

3. 1527-28. Richard Barlot, M.D. Oxon., 1508 (?). Obiit 1556, æt. 87.

1529-30. Thomas Bentley, M.D. Vide No. 2.

1531. Richard Barlot, M.D. Vide No. 3.

No records from 1531 to 1540.

4. 1541-43. Edward Wotton, M.D. Patav. incorp. Oxon. 1525. Obiit 5 Oct. 1555, æt. 63.

5. 1544. John Clement, M.D. Obiit 1 July, 1572.

6. 1545-46. William Freeman, M.D. Oxon., 1521.

7. 1547. John Burgess, M.D., Obiit 1550.

1548. Richard Barlot, M.D. Vide No. 3.

8. 1549-50. John Fryar, M.D. Cantab. (?). Obiit 21 Oct. 1563.

9. 1551-52. Robert Huick, A.M. Oxon., M.D. Cantab. incorp. Oxon., 1566.

10. 1553-54. George Owen, M.D. Oxon., 1527. Obiit 18 Oct. 1558.

11. 1555-60. John Caius, M.D. Patav. 1541; incorp. Cantab. 1544 (?). Obiit 29 July, 1573, æt. 63.

12. 1561. Richard Masters, M.D. Oxon., 1554.

1562-63. John Caius, M.D. Vide No. 11.

1564-67. Robert Huick, M.D. Vide No. 9.

13. 1568. Thomas Francis, M.D. Oxon., 1554.

14. 1569. John Symmges, M.D. Oxon., 1554. Obiit 7 July, 1588.

15. 1570. Richard Caldwell, M.D. Oxon., 1554. Obiit 1585.

1571. John Caius, M.D. Vide No. 11.

1572. John Symmges, M.D. Vide No. 14.

No records from this until 1581.

16. 1581-84. Roger Giffard, M.D. Oxon., 1566. Obiit 27 Jan. 1596-7.

17. 1585-88. Richard Smith, M.D. Cantab. Obiit 1599.

18. 1588-99. William Baronsdale, M.D. Obiit 1608.

19. 1600. William Gilbert, M.D. Cantab. Obiit 1603.

20. 1601-3. Richard Forster, M.D. Oxon., 1573. Obiit 1616.

21. 1604-6. Thomas Langton, M.D. Cantab. Obiit 1606.

22. Oct. 25, 1606 to 1608. Henry Atkins, M.D. Obiit 21 Sept. 1634.

23. 1609-11. Sir William Paddy, M.D. Lugd. Batav. Oxon. incorp. 1591. Obiit Dec. 1634.

24. 1612-14. Thomas Moundford, M.D. Obiit 1630.

1615. Richard Forster, M.D. Vide No. 20.

Apr. 9. 1616-17. Henry Atkins, M.D. Vide No. 22.

1618. Sir William Paddy, M.D. Vide No. 23.

1619. Thomas Moundford, M.D. Vide No. 24.

25. 1620. Richard Palmer, M.D. Cantab.

1621-23. Thomas Moundford, M.D. Vide No. 24.

1624. Henry Atkins, M.D. Vide No. 22.

26. 1625-27. John Argent, M.D. Cantab. Obiit May, 1643.

27. 1628. John Giffard, M.D. Oxon. Obiit 1647.

1629-33. John Argent, M.D. Vide No. 26.

28. 1634-40. Simeon Fox, M.D. Obiit 20 Apr. 1642.

29. 1641-44. Othowell Meverell, M.D. Lugd. Batav. 1613. Cantab. incorp. 1616. Obiit 13 July, 1648.

30. 1645-49. John Clark, M.D. Cantab. Obiit 30 Apr. 1653.

31. 1650-54. Sir Francis Prujean, M.D. Cantab. Obiit 23 June, 1666.

32. 1655-66. Sir Edward Alston, M.D. Cantab. Incorp. Oxon. 1626. Obiit 24 Dec. 1669.

33. 1667-69. Francis Glisson, M.D. Cantab. Obiit 1677.

34. 1670-75. Sir George Ent, M.D. Patav. 1636. Incorp. Oxon., 1638. Obiit 13 Oct. 1689, æt. 85.

35. 1676-81. Sir John Micklethwait, M.D. Patav. 1638. Incorp. Oxon. 1648. Obiit 28 July, 1683, æt. 70.

36. 1682. Thomas Coxe, M.D. Patav. 1641. Incorp. Oxon. 1646. Obiit 1685.

37. 1683. Daniel Whistler, M.D. Lugd. Batav. 1645. Incorp. Oxon., 1647. Obiit 11 May, 1684.

38. 1684-87. Sir Thomas Witherley, M.D. Cantab. 1655. Obiit 23 March, 1693-4.

39. 1688. George Rogers, M.D. Patav. Incorp. Oxon., 1648.

40. 1689-91. Walter Charleton, M.D. Oxon., 1642-3. Obiit 24 April, 1707, æt. 87.

41. 1692-93. Thomas Burwell, M.D. Lugd. Batav. Incorp. Oxon.

42. 1694. John Lawson, M.D. Patav. 1659. Incorp. Cantab. Obiit 21 May, 1705.

43. 1695. Samuel Collins, M.D. Patav. 1651. Incorp. Oxon. 1652. Obiit 11 Apr. 1710, æt. 93.

44. 1696-1703. Sir Thomas Millington, M.D. Oxon., 1659. Obiit 5 Jan. 1703-4, æt. 75.

45. 1704-7. Edward Browne, M.D. Cantab., 1663. M.D. Oxon., 1667. Obiit 28 August, 1708, æt. 64.

46. 1708. Josias Clerk, M.D. Cantab., 1666. Obiit 8 Dec. 1714, æt. 75.

(a) Des Fièvres Eruptives sans Eruption, et particulièrement de la Scarlatine sans Exanthème, par C. A. Buttura. Paris, 1857, chez J. B. Baillière.

47. 1709-11. Charles Goodall, M.D. Cantab., 1670. Obiit 23 Aug. 1712.
 48. 1712-15. William Dawes, M.D. Lugd. Batav. et Cantab., 1682.
 49. 1716-18. John Bateman, M.D. Oxon., 1682.
 50. 1719-34. Sir Hans Sloane, Bart., M.D. Aurant. et Oxon. diplomate, 1701. Obiit 11 Jan. 1752, æt. 92.
 51. 1735-39. Thomas Pellett, M.D. Cantab., 1705. Obiit 4 July, 1744.
 52. 1740-45. Henry Plumptre, M.D. Cantab., 1706. Obiit 26 Nov. 1746.
 53. 1746-49. Richard Tyson, M.D. Cantab., 1715. Obiit 3 Jan. 1749-50.
 54. Jan. 19, 1750. James Jurin, M.D. Cantab., 1716. Obiit 22 Mar. 1750, æt. 66.
 55. 1750-53. William Wasey, M.D. Cantab., 1723. Obiit Apr. 1757, æt. 62.
 56. 1754-63. Thomas Reeve, M.D. Cantab., 1732. Obiit 3 Oct. 1780, æt. 80.
 57. 1764. William Battie, M.D. Cantab., 1737. Obiit 13 June, 1776.
 58. 1765-66. Sir William Browne, M.D. Cantab., 1721. Obiit 10 Mar. 1774, æt. 82.
 59. 1767-74. Thomas Lawrence, M.D. Oxon. 1740. Obiit 6 June, 1783, æt. 72.
 60. 1675-84. William Piteairne, M.D. Oxon. (dipl.), 1749. Obiit 25 Nov. 1791.
 61. 1785-90. Sir George Baker, Bart., M.D. Cantab., 1756. Obiit 15 June, 1809, æt. 88.
 62. 1791. Thomas Gisborne, M.D. Cantab., 1758. Obiit 24 Feb. 1806.
 1792-93. Sir George Baker. Vide No. 61.
 1794. Thomas Gisborne, M.D. Vide No. 62.
 1795. Sir George Baker. Vide No. 61.
 1796-1803. Thomas Gisborne, M.D. Vide No. 62.
 63. 1804-10. Sir Lucas Pepys, Bart. M.D. Oxon., 1774. Obiit 17 June, 1830, æt. 88.
 64. 1811-12. Sir Francis Milman, Bart., M.D. Oxon., 1776. Obiit 24 June, 1821, æt. 75.
 65. 1813-19. John Latham, M.D. Oxon., 1788. Obiit 20 Apr. 1843, æt. 82.
 66. 1820-43. Sir Henry Halford, Bart. M.D. Oxon., 1791. Obiit 9 Mar. 1844, æt. 78.
 67. 1844-56. John Ayrton Paris, M.D. Cantab., 1813. Obiit 24 Dec. 1856, æt. 72.
 68. Jan. 5, 1857. Thomas Mayo, M.D. Oxon., 1818.
 The present President of the College.

PERIPHERAL OSSIFICATION OF UTERINE TUMOURS.

[To the Editor of the Medical Times and Gazette.]

SIR,—My attention has just been caught by a discussion reported in your Journal, March 14, p. 273, as to whether uterine tumours were or were not apt to undergo the process of peripheral ossification; and a statement, that Dr. Engel of Prague said that he had never seen an uterine tumour thus ossified.

I confess any doubt on the subject appears to me quite unaccountable—I have seen it so often; and have now in my museum at least four specimens of the kind. In three the ossification surrounds the tumour, like the shell of a pomegranate; and in a fourth the whole tumour (which was about as large as a middle-sized apple) is converted into a bony structure of great density.

I may also add, that I had recently a patient, still living, in whom the existence of a uterine tumour of the former kind was beyond all question.

I am, &c.

W. F. MONTGOMERY.

Merrion-square, Dublin, March 17, 1857.

REMARKABLE CASE OF MIDWIFERY.

[To the Editor of the Medical Times and Gazette.]

SIR,—Mr. C. L. Clough's "Remarkable case of Midwifery," has called to my mind a case, which occurred in my practice here about three years ago, which I will relate for the information of your readers.

A healthy young married woman, aged 19, pregnant with her second child, was sentenced to six months' imprisonment.

On the 16th of August, 1853, at a quarter before one, a.m., I was hastily summoned to the Female Infirmary, and found her in bed, and was informed she had suddenly been delivered of a child, which the nurse then held in her arms. I immediately instituted an examination; there was no hæmorrhage, the placenta at the back of vagina, out of the sphere of uterine action, was removed entire, and in a short time the child, a female fully developed, was sucking strongly. I examined the placenta, and found the umbilical cord torn and ragged. I then heard the history of the accouchement from the girl herself, who recovered without a bad symptom.

She stated that she had been quite well all day, had attended chapel, and exercised in the open air with her fellow-prisoners, had partaken of her supper, retired to bed about nine, and was soon asleep. She was suddenly awoke with a sharp pain over the abdomen; she arose from her bed, rang the bell, and was shortly attended by the Infirmary warder, who removed her to the Infirmary. The young woman had proceeded about a dozen yards on her way there, when she was again seized with a similar pain, which was of so sudden and sharp a character that it compelled her to stop and stoop down into almost a sitting position, and the child was born. She said, not expecting these were labour pains, (for they were only abdominal,) she was so astounded that she involuntarily started up, and it was at this time, doubtless, that the umbilical cord was torn; the child fell to the ground upon the stone pavement. The Infirmary warder, equally astonished, picked up the child, while the mother quietly walked up 15 stairs to the room I found her in. I examined the child carefully. It did not appear to be in the least hurt, with the exception of a slight abrasion of cuticle over the upper portion of the occipital bone. The portion of umbilical cord attached to the child was about $4\frac{1}{2}$ inches. About an hour and ten minutes had passed from the occurrence of the first pain that awoke her from her sleep, and the removal of the placenta.

I will not occupy any more of your valuable space. My impression is, that the foregoing case is an important one to the profession, especially to the medical jurist.

I am, &c.

CHARLES N. WILKINSON, M.R.C.S., L.S.A.
Resident Surgeon.

House of Correction, Wandsworth Common,
Feb. 25th, 1857.

POOR-LAW MEDICAL REFORM.

[To the Editor of the Medical Times and Gazette.]

SIR,—There has lately been written a good deal respecting "Poor-law Medical Reform," and I would beg to call the attention of the Profession generally, but especially of Mr. Griffin (to whom the thanks of the Profession are due) to the following plan: Let the attendance on the poor be established on the Dispensary plan, and let there be one or more (according to size of town or district) Central Dispensaries, with resident qualified Dispensers; and let the District Surgeon, as now, visit, and write his prescription, to be dispensed at the Central Dispensary. Of course the pay of the District Surgeon would be less than at present, as he would only have to give his time; but it is the labour and expense of providing everything that renders the pay off the present parochial Medical Officer so paltry and inadequate. I am quite sure that if the Poor-law Board would adopt and enforce this plan, great benefit would be conferred both on the Profession and the public, at scarcely if any additional expense.

Having thrown out the suggestion, I would submit to Mr. Griffin the propriety of petitioning the Poor-law authorities to substitute some such plan for the present system.

I am, &c.

W. B. STEPHENS, M.R.C.S. and L.S.A.
Plymouth, March 16, 1857.

STATISTICAL SOCIETY.—The Anniversary Meeting was held on Monday, the Earl of Harrowby in the Chair. Dr. Guy read the Report, which stated that the number of members during the last year was 384, and the amount of subscriptions and life compositions was £840. The receipts altogether, including proceeds of the sale of the "Journal," was £872; the expenditure, £816.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, March 17, 1857.

Dr. QUAIN presented, for Mr. Amos Beardsley, of Ulverston, the details of a

CASE OF POLYPUS EJECTED FROM THE STOMACH.

H. C., a female, aged 19 years, of robust appearance, had enjoyed good health till about twelve months ago, when she had an attack of Herpes zoster on the right side. This yielded to the usual treatment, and in about a week after the attack she regained her usual state of health. Menstruation has always been regular. A short time after the attack of Herpes she began to suffer from distension at the stomach, chiefly after meals, which was referred to flatulence; this was subsequently followed by pain, which was always increased after eating. The pain, which at first was present slightly and occasionally through the day, except after a meal, became very bad during the night, and disturbed her sleep. For the last three months she has lost much weight, during six weeks as much as a stone and a half. The bowels have always been regular; but the urine has been turbid on cooling since the attack of shingles, —sometimes plentiful, and sometimes scanty. She has frequently felt faint from the pain at the stomach, which latterly has also extended to the left side; no sense of soreness or tenderness externally. About a month ago, Mr. Beardsley prescribed an alkali and bitter infusion, which relieved her pain and the flatulence, etc., somewhat. The case being considered as a derangement of the stomach, he heard no more of the case until Tuesday last, when on going to her usual employment she felt suddenly faint, and vomited the tumour laid before the Society. At the time of its ejection, she felt what appeared to be another rising in her throat, but she swallowed it again; she felt very faint and poorly all the subsequent day, with a great deal of soreness at the pit of the stomach, extending to the left side. Her appetite has failed her during this week; but she now feels as well as before she vomited, though she has at intervals ejected a little blood, etc. which has risen into her mouth. The pulse is 84; her appearance is now somewhat sallow and pale. She often feels her hands and fingers to be numb; and she suffers from a constant creepy feeling of the flesh. For the last twelve months she has had much flatulence, and her appetite has varied, sometimes rather voracious, and at others the contrary. The tumour, which is about the size of a small chestnut, appears to have been attached by a very small pedicle to the mucous coat of the stomach. It was very firm when vomited, and like an unshelled egg. It appeared very vascular, and the anastomosis of the blood-vessels on its surface were well discerned by reflected light, and, indeed, even by the unaided eye. The cut surface of the tumour presented small foramina or cells, and the specimen, when examined by the microscope, was found to consist of a mass of connective tissue, blood-vessels, and granular cells, and granular particles, apparently fatty, covered by a layer of mucous membrane. The membrane consisted, as usual, of a basement layer, the surface of which was covered by a layer of columnar epithelium. These appearances are well seen in the figures drawn by Mr. Tuffin West, taken from his own dissection. These details show the tumour to be of a simple character, and corresponding to that described as the gastric polypus. It is a rare form of disease, not often reaching the size of the present specimen. Mr. Beardsley very properly assigns the presence of the gastric symptom to the existence of this or similar tumours, some of which probably still exist, as the symptoms, though mitigated, have not disappeared. He also recognises a connexion between the occurrence of the shingles and the presence of the tumour.

Dr. HARE asked whether the dyspeptic symptoms had been relieved after the ejection of the little tumour.

Mr. HENRY thought the tumour might, possibly, have been an œsophageal growth, and not a gastric one, and referred to a specimen shown at a former meeting by Mr. Holt, in which a large pedunculated fibro-fatty polypus had been found in the œsophagus.

Dr. QUAIN replied that the structure of the growth in Mr.

Beardsley's case was quite different from that in Mr. Holt's. In reply to Dr. Hare, no alleviation of symptoms had ensued.

Mr. HUTCHINSON exhibited for Mr. Startin a specimen of

SPINAL CORD AFTER DEATH FROM STRYCHNIA POISONING.

The specimen was not a recent one, but had been obtained by Mr. Startin many years ago from a case in which death had followed the medicinal use of strychnia in the Birmingham Hospital. The patient was a man, aged 46, the subject of hemiplegia, who had taken strychnia for some time with benefit. At length death, with all the usual train of symptoms, followed two hours and three-quarters after the exhibition of an increased dose, consisting of a grain and a half of an impure drug. The specimen was of interest in showing extensive patches of extravasation beneath the spinal arachnoid of the lower half of the cord.

Mr. HUTCHINSON also showed a specimen of
MEDULLARY CANCER OF THE TESTIS FROM
AN INFANT.

The specimen, which was quite recent, having been removed by operation that morning, was a good example of the brain-like cancer. It was nearly the size of a fist, without cysts, and without extravasation of blood. Large portions in the interior had undergone fatty degeneration, and were in the condition known as "saponified cancer." The patient was a little boy of two years old, in fair health and well grown. The increased size of the testis had been first noticed about ten months ago, and the gradual growth had been almost painless. The cord not being diseased, and there being no signs of affection of the lumbar glands, Mr. Hutchinson had deemed it a suitable case for operation. The scrotum was adherent somewhat to the gland, and was crossed by numerous large veins. While the patient was under chloroform, just prior to the operation, it was deemed best to further confirm the diagnosis by introducing a grooved needle, and examining under the microscope the obtained matters. This showed cancer nuclei, and cancer cells in a state of fatty degeneration, the canula having entered one of the saponified parts. The operation was accomplished without much bleeding, the whole of the cord being tied *en masse*. Two of the boy's paternal aunts had died of schirrhous of the breast. Mr. Hutchinson adverted to the rarity of cancer of the testis in children. The only examples of it which had fallen under his own notice were one under the care of Mr. Luke, in which the boy was only 4, and a second under that of Mr. Canton, in which he was 9. Mr. Earle had, however, recorded (*Medico-Chirurgical Transactions*) a case in which the boy was but a year old at the time the disease commenced.

ROYAL MEDICAL AND CHIRURGICAL
SOCIETY.

TUESDAY, MARCH 10, 1857.

Dr. LOCOCK, President, in the chair.

Mr. BIRKETT communicated a paper by THOMAS BRYANT, Esq.

ON THE PATHOLOGY OF THE ARTICULAR
CARTILAGES.

The author commenced by briefly describing the method by which cartilages are nourished, and laid stress upon the point of their dependence upon the integrity of other structures for their supply of blood; the consequence of this dependence being well shown in the fact, that the nutrition of the cartilages is necessarily arrested or perverted upon any disturbance to the nutrition of the part, upon the integrity of which they depend for their nourishment. The diseases to which the cartilages are liable were described, as hypertrophy, atrophy, and granular, fatty, and fibrous degeneration. That hypertrophy might exist under the same circumstances that induce such a result in other tissues could not be denied, although the author knew of no genuine case. The cases described as such were associated with other disease of the joint, and it was questioned whether such a thickening was not the result of softening, or mere swelling of the tissue, or some other pathological change. That atrophy of cartilage exists, daily experience gave positive evidence, occurring either in old or young people, where any of the requirements for healthy nutrition were defective.

Under the head of granular degeneration, was included the majority of the cases of what is called ulceration of cartilage. The author adverted to the investigations of Professor Redfern, stating that his own researches had but tended to convince him of the truth of that writer's conclusions. He then described the microscopical appearances of cartilage in the various stages of its degeneration, and stated that the degeneration might primarily commence either in the cartilage itself, or upon its synovial or bony surfaces; in the latter cases, the degeneration being only secondary in the order of events, some diseased or perverted nutritive change in the bony lamella, or synovial membrane, being antecedent to the degeneration of the cartilage. A case was then given, illustrative of the dependence of the cartilages for their integrity upon the integrity of those tissues to which they were connected. It described a small patch of the synovial surface of a cartilage having become degenerate, exactly corresponding to a patch of inflamed synovial membrane, the other portions of the cartilage being quite healthy. If this membrane had been ruptured, an ulcer, so called, would have been visible. The analogy between this process of degeneration and of ulceration generally was then alluded to, and the author asked if it were not fair to conclude that the same cause—namely, inflammation, which we know does produce a normal nutrition in a part, would in other tissues be also followed by the same series of changes, and that granular degeneration of the cell structure, whatever that structure may be, is the element of the process which is called ulceration? Degeneration of cartilage as depending upon disease of the bony lamella or heads of the bones was then mentioned, and the different appearances of the cartilage in the different stages of the disease was then described. Fatty degeneration next claimed attention, and was described as being constantly found in joints which had been deprived of their natural function by any cause whatever. The general and microscopical appearances were then given, and a case illustrative of the subject read. The author then stated that it was due to this form of degeneration that the rapid disorganization of a joint follows upon an accidental attack of inflammation in chronic diseased joints. Fibrous degeneration was next described, and the different appearances to the eye and the microscope in its different stages. The connexion between this form of degeneration and the calcareous degeneration of the osseous lamella was mentioned, and also the connexion between the fibrous and granular degenerations, the former appearing to be a more chronic change of a somewhat similar character. Other changes were then alluded to, not included in the preceding divisions, such as the deposition of gouty materials in and upon the cartilages of joints, and the absorption of cartilage, leaving the porcellaneous or dense bony surface of the osseous lamella. A case was then read illustrating the connexion between the bony lamella and the cartilage, and demonstrating that the degeneration of the latter and the calcareous degeneration of the former were produced by similar causes.

Mr. A. URE said, he considered the Society greatly indebted to Mr. Bryant for the clear manner in which he had explained the distinctive diseases of articular cartilages. He had, on several occasions, seen instances of granular disease, one of which was a striking case that occurred to him in September last, after amputating a boy's limb for pulpy degeneration of the synovial membrane. There was a peculiar modification of the fibrous disease, called the *pilous*, the surface being like the pile of Utrecht velvet. This he supposed the author would include under the head of fibrous. The views propounded by the author were entertained very widely on the Continent, and especially in Paris. Mons. Broca had alluded to a change which he called the ulceroid degeneration of cartilage.

Mr. QUAIN said he should have expected a somewhat different paper, judging from its title. The "pathology" of the cartilage he understood to mean the causes of the disease, the symptoms, the diagnosis, as well as the morbid anatomy, and he should have been very much interested if the author had connected the morbid anatomy and the morbid changes with the symptoms and appearances during life. He had been especially struck with the case mentioned by the author in which a child died with hydrocephalus in twenty-eight days from the commencement of the disease of the hip. It was interesting to have such a dissection, as surgeons seldom had the opportunity of seeing the disease and examining it after death, until it was in a very advanced condition. The

author described very clearly the inflammation of the synovial membrane and the ligamentum teres; he ascribed the disease of the cartilage to the disease previously existing in the synovial membrane; and probably correctly. But he said also that the cartilage on the head of the bone was softened, and that the synovial membrane over it was inflamed, ascribing the change in the cartilage to the change in the synovial membrane. But was it certain that there was a synovial membrane over the head of the bone? He believed histologists did not admit the existence of such a membrane on those cartilages.

Mr. SPENCER SMITH exhibited a preparation, which he had brought from the Museum of St. Mary's Hospital, in reference to the question of the existence of a synovial membrane over the head of the bone. It was admitted, he said, by histologists, that there was such a membrane in the fœtus, but they denied its existence in after-life. In the preparation, however, which he exhibited, a membrane could be distinctly seen raised from the surface of the cartilage, the cartilage being hollowed out into a cup beneath it. There was another splendid preparation in the hospital, in which three or four such destructions of cartilage had taken place upon the lower end of the femur. The joint had been rapidly destroyed by acute inflammation, and on opening it there were three or four little puffs on the synovial membrane, some of the size of horse-beans, and others as large as peas. The synovial membrane projected forward, and on slitting it open, a soft, creamy fluid escaped, and the cartilage was found to have undergone a destructive process. The membrane in the specimen he exhibited had not the slightest appearance of being a false one.

Mr. BIRKETT said he had carefully examined many subjects in order to ascertain the existence of such a membrane; but he had never met with anything approaching it in the adult subject. In infancy and very early life he had discovered near the circumference of the head of the femur a small development of such tissue as might be called epithelium, but nothing approaching his idea of the character of a membrane. He recollected Mr. Toynbee bringing to the Microscopical Society some years ago specimens to illustrate the existence of the synovial membrane; but they were by no means satisfactory to him (Mr. Birkett). The membrane in the specimen exhibited by Mr. Smith he regarded as something adventitious. A synovial membrane was an extremely delicate tissue, but the membrane in the specimen was as thick as a piece of paper. Such membranes he considered to be the result of some inflammatory action pouring out lymph, which became organised upon the surface of the cartilage.

Dr. MAYO expressed his concurrence in the remarks of Mr. Quain, in reference to the right use of morbid anatomical investigations, urging that they should be always combined with strictly dynamical, physiological, and practical considerations, having reference to the actions and conditions of life.

Mr. S. SMITH said the thickness of the membrane in the specimen he exhibited might be accounted for by the circumstance that disease had been going on in the joint nearly 18 months before it was amputated.

Mr. BRYANT, referring to the observations of Mr. Quain, said that articular cartilages depended so much for their integrity upon the integrity of other structures, and were involved so much in the diseases of other structures, that if he had extended his communication so far as to meet the requirements of Mr. Quain, he should have been led into a paper upon diseased joints, and have taken a far wider field than he proposed to himself. As to membrane over the articular cartilage, he could not say whether it was synovial or not. It was, however, distinctly a membrane, being composed of very different structure from that of the cartilage itself.

A communication was read from Dr. BENICE JONES,

ON A READY METHOD OF DETERMINING THE PRESENCE, POSITION, DEPTH, AND LENGTH OF A NEEDLE BROKEN INTO THE FOOT.

After adverting to Mr. Alfred Smee's lecture, published in the *Medical Times* for December 14, 1844, the author gives a most clear and minute description of the means which he employed for the above-named object; but it is so succinctly related as to defy abbreviation. The communication will shortly appear in the "Proceedings" of the Society. The deductions to be drawn from it, however, may be stated to be—First: That the presence of an embedded needle may most

surely be determined by making it into a magnet by induction, and then testing for it by a minute suspended magnet. Second: That the direction of an imbedded needle may be determined by marking the direction in which the inducing magnet makes the strongest magnet. When the length of the imbedded needle lies in the line joining the poles of the inducing magnet, it becomes the strongest magnet. Third: The depth of the imbedded needle may be determined by the intensity of the action near the surface of the skin. Fourth: The length of the imbedded needle may be guessed when the direction is known, and the amount of magnetic action at the part of the surface opposite to the spot where the needle entered is observed. Fifth: The motion of the imbedded needle may be determined by carefully noting from time to time the changes that require to be made in the position of the inducing magnet, in order to give to the hidden needle the strongest possible magnetism.

Mr. QUAIN said he had in several instances successfully adopted the plan recommended by Mr. Smee. He considered the method proposed in the paper, of magnetizing the needle in the flesh, to be a great improvement. The portion of needle employed in the experiment should be very small, otherwise it would not be acted upon by the needle that was imbedded. By this plan, he was enabled on one occasion to discover a small fragment of iron imbedded in the ulnar nerve.

Mr. BROOKE said that every surgeon might not be in possession of a powerful magnet to magnetise the imbedded needle; but this effect would be as well produced by a ring of copper-wire containing about 100 coils, similar to that manufactured for galvanometers, the two ends of the wire being connected with a galvanic battery. The greatest amount of magnetism would be induced in the imbedded needle, when its direction was perpendicular to the plane of the coil. But if the plane of the coil was coincident with the plane of the needle, scarcely any amount of magnetism would be induced.

Mr. SPENCER WELLS said it did not appear from the paper that the needle was actually found.

Dr. COPLAND asked if any surgeons had been successful in extracting needles thus introduced.

Mr. QUAIN said he had taken away two fragments. He said the experiment required very much caution, as the little needle was liable to be acted upon by the air.

Dr. COPLAND mentioned the case of a lady who had a needle imbedded deep in her foot, producing lameness for a considerable time. Sir Benjamin Brodie was consulted, and he advised that nothing should be done. After some weeks the pain disappeared, and the lady was able to walk; the needle was never afterwards found, and no inconvenience was experienced.

Mr. CÆSAR HAWKINS, the late president, moved a vote of thanks to Dr. Peacock and Mr. Smith, the two secretaries, passing a warm eulogium on their services during his (Mr. Hawkins's) tenure of office.

Dr. WEBSTER seconded the motion, which was carried by acclamation.

Mr. SMITH briefly acknowledged the compliment, and the Society adjourned.

WESTERN MEDICAL AND SURGICAL SOCIETY.

FEBRUARY 20, 1857.

Dr. FULLER, V.P., in the chair.

Mr. LEGGATT read a paper on

A CASE OF PROGRESSIVE FATTY DEGENERATION AND ATROPHY OF THE VOLUNTARY MUSCLES.

He commenced by alluding to the various monographs and papers hitherto published on the subject; especially that in the *Archives Générales de Médecine* (1850), which contains the history of several cases, partial and general. Dr. Moore (*Dublin Medical Journal*, 1852), who published a similar paper. He then passed on to Dr. R. Quain's long note appended to his paper on Fatty Degeneration of the Heart (*Med.-Chir. Transactions*, 1850), in which several cases are mentioned in which this disease occurred. He then passed on to the paper on this subject by Dr. Meryon, which appeared in *Med.-Chir. Transactions*, 1852. Many cases are there recorded,

but the records of only two post-mortem examinations, in both of which the nervous centres were found perfectly healthy, though the voluntary muscles of the upper and lower extremities were observed in various stages of fatty degeneration. The only symptom observed had been loss of power, commencing in the lower extremity. Cruveilhier noticed the same disease in *Arch. Gén. de Méd.*, 1853. In all the cases examined the nervous centres were healthy, but in two the anterior roots of the spinal nerves were greatly atrophied, especially in the cervical region. Hence he considered the disease to be essentially dependent on this cause; that the disease is in fact paralysis, and that the atrophy and degeneration of the muscles are secondary consequences only. Another case was quoted (*Brit. and For. Med.-Chir. Review*, Oct. 1855), in which the disease was evidently dependent upon chronic arachnitis of the chord, originating in a fall; in this case, too, the anterior roots of the spinal nerves were inflamed, softened and atrophied.

In his own case his observation of it had extended over above ten years. The subject of it was a male, born in the country, of healthy parents, in 1838, and removed to London in 1840. When first seen by the author he was strong, vigorous and healthy, but in the summer of 1845 he had jaundice, measles and remittent fever, the latter severely. After his recovery he became weak in his lower extremities, and fell frequently in walking. In 1847 he was seen by Sir B. Brodie, who considered the case as some spinal affection. In 1850 Sir B. Brodie recognised the disease as similar to Dr. Meryon's case alluded to. The symptoms were loss of power in the lower extremities, some wasting of the muscles of the thighs, those of the calves remaining firm and large. The treatment was essentially tonic, with galvanism. No benefit occurred, the muscular weakness increased, and gradually extended itself to the upper extremities. The muscles of the face, of deglutition and articulation, were not affected, nor was the sensibility of the skin. The rectum and bladder were unaffected, except that during 1849 there was slight incontinence of urine. His faculties were unimpaired, and his general health was good. He died from pneumonia in 1856, aged 18. A careful examination was made 28 hours after death, during which the muscular system generally was found to be wasted, and the lower limbs much emaciated. The spinal chord was softened about its middle one-third, but not inflamed. The roots of the spinal nerves were healthy, and so was the brain, and all the different viscera, except the right lung at its base, where it was softened. In the cervical and dorsal regions of the back the muscles were healthy, in the lumbar pale; the intercostals were thin, and the diaphragm very pale. By the microscope no inflammatory alteration could be detected in the chord or its membranes, but it showed fatty degeneration in its various stages in the pale muscular structures, and in some of these fibrous degeneration without fat. In the heart much of the striated appearance of health was absent, and much of its structure was undergoing granular and fatty degeneration.

The author then analysed fifteen cases of this disease, and stated the results thus—With respect to the brain: in 6 the brain was healthy; in 1 the white substance was softened; in 1 there was an osseous plate in the arachnoid. With respect to the chord: in 6 it was healthy; in 1 partially softened with fatty degeneration; in 1 partially softened without fatty degeneration; in 4 the anterior roots of the nerves were not observed; in 1 they were inflamed, softened, and atrophied, the chord also being inflamed and softened; in 1 they were normal, while the chord was softened, but not inflamed. He thus considered that the disease in question was not of spinal origin, in his own case being persuaded that the softening of the chord was only of recent origin, and not the cause of the paralysis. He also regarded it premature to advance M. Cruveilhier's theory, that it consisted in atrophy of the spinal nerves at their roots; but rather viewed the disease as dependent upon depraved nutrition of the muscular system generally. In addition to wasting and want of power, M. Cruveilhier had described among the symptoms pain, twitchings, and cramps; these are described in no other paper. In all, the general health was good, and the command of the sphincters complete. The prognosis as to progress and to recovery was always unfavourable. The treatment, of course, was tonic, with the use of galvanism. The author then, in conclusion, enumerated the causes, and grouped them thus:—1. Excessive muscular action and fatigue. 2. Severe

illness, and utter exhausting influences. 3. Hereditary tendency (?) This seemed established in Dr. Meryon's and M. Aran's cases; though, in the present instance, the author could not trace this as a cause.

In the conversation which followed, Mr. Brodhurst mentioned a family, in which four out of nine members have been similarly affected: of these two had died and two survived; of the latter, one had head symptoms; of the former, in one the brain was softened after death, the chord not being examined; of the others, one died from apoplexy, one from phthisis, and one from hydrocephalus.

Dr. FULLER related three cases in its partial form, affecting the back of the neck, and the right upper extremity (two cases) respectively.

Mr. MARTYN stated that the survivors mentioned in Dr. Meryon's paper had been improving up to the present time.

The Society then adjourned.

HARVEIAN SOCIETY.

FEBRUARY 5.

Dr. SIEVEKING read a paper upon the

ACTION OF IODIDE OF POTASSIUM.

He began by remarking that of the remedies we owe to the advancement of modern chemistry, none had obtained a higher place in the estimation of medical men than the iodide of potassium. There might be some difference of opinion as to its efficacy in this or that class of disease, or in individual cases; but its general utility as a member of the pharmacopœia was undeniable. Rarely producing any unpleasant effects, and unless administered with culpable carelessness, never giving rise to disturbances in the system of a dangerous and permanently injurious character, it might be classed among the safest and most beneficial remedies we possess. Dr. Sieveking observed that the unpleasant symptoms produced at times by the remedy were easily avoided or corrected, either by altering the doses, or by persevering in the use of the agents, and then briefly reviewed the general therapeutic effects of iodide of potassium. He observed that according to the disease in which it was administered, or according to the theory in vogue, it might be called an alterative, an eliminant, or a tonic. Dr. Sieveking, guarding himself against the imputation of attempting to exhaust the subject in a single paper, stated that he wished to bring certain cases and statements before the Society, to show the threefold action of the remedy. 1st, As an evacuant of excessive morbid secretions. 2nd, As an antidote to organic poisons. 3rd, As an antidote to and eliminant of inorganic poisons. With regard to the first class, the author stated that although the iodide might be shown to act mainly as a diuretic, it could not be placed in the same category as those agents which operate solely by promoting copious secretions, as the amount of fluid discharged in consequence of its exhibition did not always bear a definite ratio to the intensity of the disease and the quantity of morbid accumulation in one of the cavities while acting as an eliminant, it also appeared to correct the morbid condition of the blood and the vascular system which primarily induced the disease. In illustration of the more exclusively eliminant action of the iodide, Dr. Sieveking brought forward a case of hydrothorax of an aggravated character, in which the speedy cure appeared exclusively due to the salt in question. The author also referred to the eliminative power which iodide of potassium appeared to exert in hæmorrhagic effusion of the brain. Under the second head Dr. Sieveking spoke of the action of iodide of potassium in counterbalancing and removing the organic poisons, which appeared to constitute the *materia morbi* in numerous diseases. He adverted to syphilis in its different forms, to various scaly and other forms of skin disease; and brought forward cases in illustration, cases which, however, he admitted to be incomplete as proofs, on account of the iodide not having been the sole remedy administered; he urged that the conviction which a multitude of small experiences wrought in the mind of a practitioner could with difficulty be illustrated by solitary instances of so complicated a character as many of the diseases which might be classed under the second head. In the third head the author explained his views with regard to the action of iodide of potassium in the case of the

various affections resulting from metallic poisoning. Cases of lead poisoning were brought forward, and a well marked case of mercurial poisoning was also quoted, in illustration of the value of the iodide in such cases. Dr. Sieveking adverted to the importance of a correct diagnosis in cases of lead poisoning; as symptoms, which otherwise might induce a most unfavourable prognosis, would, when regarded as the result of saturnine intoxication, justify a much more favourable view. The difficulties attending the detection of lead in the urine, where it was manifestly being eliminated from the system, were adverted to, and it was suggested that probably at times some, if not all, the lead was evacuated by the intestinal canal. Dr. Sieveking concluded by observing that he had by no means alluded to all the various forms of disease which called for the exhibition of iodide of potassium, but that he had merely desired to submit to the consideration of the Society some of the opinions which practical experience had induced him to form relative to the drug, and to elicit from the stores of observation of the members further illustrations in regard to its uses and effects.

Dr. CAMPS submitted to the notice of the members of the Society a

NEW PREPARATION OF LIME,

manufactured by Mr. William Bastich, Pharmaceutical Chemist, which Mr. Bastich had named "*Liquor calcis concentratus*." The advantages of this preparation are stated to be—

1st. It permits the internal administration and external use of lime in solution, without the present necessity of employing an inconveniently large quantity of fluid.

2nd. It enables the prescriber to combine lime with bulky vehicles or remedies, as infusions, medicated waters, decoctions, etc., without materially increasing the volume of the dose.

3rd. Its greater portability and freedom from decomposition when kept than the ordinary *liq. calcis*.

4th. Being sixteen times stronger than the *liquor calcis* of the Pharmacopœia, it may be diluted to any required strength.

5th. It removes the existing limits beyond which the strength of many external applications, as *lotio flava*, *lotio nigra*, etc., it has not been possible to increase.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS, THURSDAY, March 12.

ARMY MEDICAL REFORM.

Mr. STAFFORD said he wished to repeat the question which he had put to the Under-Secretary for War last night on the subject of the Medical Department, not that he had any hope of receiving a favourable answer, for if the hon. gentleman had had any reform to announce he would not have been silent on it last night. He would, however, enter his earnest and mournful protest against sending out troops for active service in China without some steps being taken to ensure them against a recurrence of the terrible calamities which had happened in our military hospitals at the commencement of the last war. When those troops disembarked in China another general hospital would be opened on those shores, which would be conducted on the same principles, or rather with the same want of principle, and would be exposed to the same confusion of departments, and the same clashing of authorities which had made Scutari what it was. His complaint was that the promises made by the Government, and more particularly by the noble lord at the head of the Government, two years ago, that the Army Medical Department should be thoroughly reformed, had been set at naught. As a mere matter of economy, and apart from philanthropic motives, every care ought to be taken of the lives of our soldiers, and every measure adopted which experience showed to be necessary to make the Medical Department completely efficient. He should be glad to hear from the Government that they were prepared to redeem the promises which they had made when they went into office, and if he had the honour of a seat in the next Parliament he should bring the whole subject before it.

Mr. PEAR said the question now put to him by the hon. gentleman was not exactly a repetition of that which he asked last night. The question asked by the hon. member last night was

whether the Government had taken or contemplated taking any steps to carry into effect the resolutions agreed to by a Committee of last session with reference to the state of the Army Medical Department. Since last evening he (Mr. Peel) had read those resolutions, and he found that the more important recommendations contained in them were that there should be an increase in the scale of pay of Medical officers, and that additional facilities should be afforded for their retirement upon half-pay. He agreed with those resolutions. He would not deny that the advantages offered in other departments of the service had the effect of preventing the most able Medical men from competing for employment in the Army Medical Department, and he was anxious that the Medical officers of the army should possess at least equal advantages with those enjoyed by the same class of officers in other departments. The hon. gentleman was aware that the amount which the Government could expend upon the army was restricted, and it was necessary to make a selection among the various improvements which were suggested. Those improvements which were regarded as of the greatest importance were first carried into effect, and others which, though important, were of less pressing necessity, were postponed. This was the reason why the improvements to which the resolutions referred had not been carried into effect. The hon. gentleman had expressed his confidence that there was no prospect of anything being done by the Government. He (Mr. Peel) did not know on what grounds the hon. gentleman could justify such a statement. He believed that hon. gentleman was as well aware as he was himself that it was the intention of the Government to issue a commission to inquire what alterations and improvements could be effected in the existing arrangements of the Army Medical Department, and he (Mr. Peel) confidently believed that the recommendations of that Commission, coupled with the resolutions of the Committee of last session, would enable the Government to deal with this question in a manner which would be satisfactory to the Medical officers and beneficial to the service. The hon. gentleman had indulged in very gloomy predictions with regard to the sanitary state of the troops who were about proceeding to China. The climate of that country was undoubtedly unfavourable to European constitutions, but he was confident that all possible arrangements for preserving the health of the troops would be made, so far as that object could be effected by the provision of ample hospital accommodation, the supply of all requisite medical stores, and the sending out of a numerous body of Medical officers.

Mr. STAFFORD observed that what he had stated was, that the defective organisation of the general Hospital system was one of the chief causes of the mortality at Scutari, and that that system had not been improved.

Sir W. WILLIAMS said the hon. gentleman (Mr. Stafford) had referred to the inefficiency of the Hospitals at Woolwich, but he could assure the hon. member that he had been totally misinformed on that subject. He (Sir W. Williams) invited the hon. gentleman, and any other members of that House, to visit those Hospitals. A few weeks since he had the honour of escorting Miss Nightingale over the whole of the establishments, when she expressed herself highly pleased with the arrangements; and on the following day Colonel Lefroy wrote to him expressing the great gratification Miss Nightingale had derived from her visit to the Artillery and Cadet Hospitals, and her opinion that they were the best military Hospitals she had seen, with the exception of that of the Guards at Windsor (as we understood).

Mr. STAFFORD said, with reference to the observations of the gallant general (Sir W. Williams), that he had no doubt Miss Nightingale had praised the efficiency of the Woolwich Hospitals, but he would ask whether the sites, the structure, and the sanitary arrangements of those Hospitals were such as would be approved by Medical men? That was all he (Mr. Stafford) had meant to say, without intending to cast the least imputation upon the officers of the Army Medical Department, either at Woolwich or Portsmouth.

Mr. COWAN asked whether it was the intention of the Government to fill up the Professorship of Military Surgery in the University of Edinburgh, which became vacant by the death of Sir G. Ballingall about the end of 1855?

Mr. PEEL replied that it was the intention of the Government to appoint a Professor to the chair of Military Surgery in Edinburgh. Arrangements were being made for that pur-

pose, and the appointment would take place in the course of a short time.

HOUSE OF COMMONS.—FRIDAY, March 13.

SMITHFIELD MARKET.

Lord R. GROSVENOR asked the Chancellor of the Exchequer whether he was able to give an assurance that the influence of the government would be used to prevent the appropriation of the vacant site of Smithfield market to any other purpose than that of the enjoyment and recreation of the public?

The CHANCELLOR of the EXCHEQUER had already stated that the Government had intimated to the City authorities that they would not consent to the appropriation of the site of Smithfield to the purpose of a dead meat market. The wishes of the Government were that it should be appropriated in accordance with the recommendation of the Committee. Since he addressed the House on this subject, a letter had been received from the City Remembrancer, in which he stated that the Corn and Markets Committee had had the subject in consideration for some time past, and he expected that in the course of next week they would make a communication to Government on the subject. He hoped, therefore, that the matter would be speedily settled.

POOR-LAW MEDICAL REFORM.

YORK SCHOOL OF MEDICINE.—A meeting of the Students, etc., of the York School of Medicine was held in the county Hospital, York, on March 3, for the purpose of considering the present position of Poor-law Medical officers, at which the following Resolutions were passed: Mr. H. Pritchett occupied the chair:—1. Proposed by Mr. Needham, seconded by Mr. Hood,—That this meeting considers the present position of Poor-law Medical officers as highly unsatisfactory, and their remuneration totally inadequate for the laborious services rendered, and the ability necessary for their proper discharge. 2. Proposed by Mr. Hood, seconded by Mr. Smith,—That the Students of the York School of Medicine desire to express their warmest thanks to Mr. Griffin for his indefatigable efforts in the cause of Poor-law Medical Reform, and to assure him of their sympathy and support in the prosecution of the work. 3. Proposed by Mr. Bickerdike, seconded by Mr. Needham,—That this meeting considers that the regulation of the salaries of Poor-law Medical officers should not be left in the hands of Local Boards of Guardians, they being in general either totally incapable of justly appreciating the value of Professional services, or so unjust as—while acknowledging the inadequacy of the remuneration—to refuse to increase it. 4. Proposed by Mr. Evers, seconded by Mr. C. Storrs,—That the Students of the York School of Medicine do pledge themselves not to accept of any Poor-law appointment until the present grievances are redressed. 5. Proposed by Dr. Hanbury, seconded by Mr. Hood,—That this meeting regards those members of the Profession, who withhold from Mr. Griffin their support, because they consider themselves not to be personally interested in the success of his efforts, as destitute of generous feelings towards their Poor-law Medical brethren, and wanting in Professional spirit, since this meeting considers the interest and standing of the whole Profession to depend upon those of its parts. 6. Proposed by Mr. Battley, seconded by Dr. Depraz,—That subscriptions be entered into for the support of the Poor-law Medical Reform Association. 7. That Mr. Needham be requested to act as Honorary Secretary, and Mr. H. Pritchett as Treasurer.—FREDERICK NEEDHAM, Honorary Secretary.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, March 12, 1857.

BROOK, HENRY, Cantor, Cambridgeshire.

CARVER, CHARLES HANDASYDE, Great Yarmouth.

REED, FREDERICK, Kensington.

RUSSELL, GEORGE, Merthyr Tydvil.

YARWOOD, CHARLES, Birmingham.

The names of gentlemen who have passed the examination in Classics and Mathematics, held on Tuesday and Wednesday, the 17th and 18th inst. :—

BRAMLEY WILLIAM STURDY, St. John's, Wakefield.
 BUCKMASTER, CHARLES, 81, Piccadilly.
 BUSH, DANVERS WARD, Weston, Somerset.
 CATT, CHARLES V., Sussex County Hospital.
 DUDLEY, REGINALD, Holmwood, Dorking.
 EASTES, GEORGE, Folkstone, Kent.
 FINCH, HENRY, Newnham Crofts, Cambridge.
 GARDNER, EDWARD B., Harrow.
 GROSJEAN, JAMES K., London.
 GWYNN, EDMUND, High-street, Shadwell.
 HARRISON, CHARLES, Lincoln County Hospital.
 HAWKIN, ROBERT, Dorchester.
 HENSMAN, FRANK H., Kimbolton.
 HUNTER, RICHARD, London.
 HUNTER, WILLIAM F., Margate, Kent.
 JONES, JOHN, Cambridge.
 KILLICK, WILLIAM, St. Helens, Lancaster.
 KING, WILLIAM CLIFFORD, Bridgewater.
 LEECH, DANIEL JOHN, Urmston, Manchester.
 LEEDS, THOMAS, Manchester.
 MARSH, FREDERICK H., St. John's-street, Clerkenwell.
 NELSON, SAMUEL, Acomb, Yorks.
 NEWBY, THOMAS, Grimsby.
 OWEN, FRANCIS M., Bangor, North Wales.
 PARKER, ROBERT WM., Hackney.
 PRANGLEY, THOMAS, Winchester.
 POTTER, JOHN B., Farnham, Surry.
 RAYNER, THOMAS VERNON, Stockport.
 ROBINSON, HAYNES S., Norwich.
 ROBINSON, STEWART H., Clevedon.
 SCHOLLOCK, THOMAS JAMES, Ulverstone, Lancaster.
 SIDDALL, JOSEPH B., Morton, Derbyshire.
 SMITH, THOMAS STARKEY, Warrington.
 SMITH, WILLIAM JOHNSON, High-street, Wisbeach.
 TANNER, ROBERT, Gloucester H. Ledbury.
 TIBBITTS, EDWARD THOMAS, Repton, Derbyshire.
 TROTTER, CHARLES JOHN, Holmfirth.
 VERNON, BOWATER J., Sussex County Hospital.
 WALLER, CHARLES B., Finsbury-square.
 WARRINGTON, FRANCIS WM., Skelton, Stafford.
 WATERS, JOHN GEORGE, Bedford.
 WHITMARSH, EDGAR D., Endless-street, Salisbury.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 6th inst. :—

JACKSON, THOMAS VINCENT, University College.
 JONES, WILLIAM PODMORE, Old Kent-road.
 LIDDARD, THOMAS, Notting-hill.
 RAWLING, WILLIAM THOMAS, Thurloe-square, Brompton.
 ROBERTS, DAVID LLOYD, Manchester.
 SANG, WILLIAM BURNUP, Newcastle-on-Tyne.
 SIDDALL, GEORGE OLDHAM, Alfreton, Derbyshire.
 SWEETING, THOMAS, Reading, Berkshire.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.—On Wednesday evening the 9th Anniversary Festival of this admirable Charity was held at the London Tavern, where upwards of 200 gentlemen sat down. Earl Granville presided. The usual formal toasts having been given and enthusiastically responded to, the noble Chairman gave the toast of the evening, urging the claims of the Charity in a most humorous and forcible appeal. His lordship referred to the annual report of the Charity, from which it appeared that the number of out-patients during the past year had been 5,687, or 953 more than during the previous 12 months. Of this number there had been cured or relieved, 4604; reported as dead, 40; and remaining under treatment, 1043. The in-patients for the same period amounted to 242, of which number 50 had been discharged cured, 139 had been relieved, 18 had died, and 35 remained under treatment. The report also mentioned that the maintenance of the Charity, as at present constituted, required a sum of nearly £4000 per annum, while the current income from subscriptions was only £900.

AMPUTATION OF THE CERVIX UTERI, BY THE ECRASEUR.—Dr. McClintock has recently performed this operation in Dublin, not half an ounce of blood having been lost.

THE LEVEE.—At the Prince Consort's levee on Thursday, the general circle was attended by the following members of the profession :—Mr. Fisher, chief surgeon to the metropolitan police; and Mr. Edwin Saunders, surgeon-dentist to the Queen. The following were presented :—Dr. Hunter, on return from foreign service; Dr. C. R. Kinnear, on promotion and appointment to Jamaica Hospital; Dr. Lavies; Dr. Linton, on return from the Crimea, on being appointed a C.B., and on promotion; Dr. Mayo, on appointment to the Presidencieship of the Royal College of Physicians; Dr. J. Sandys; Dr. Wollaston, on return from Scutari. The following attended the levee :—Sir Charles Aldis, and Sir John Liddell; Drs. Locock, Aldis, Evans, R. M. Rutledge, Breslin, and Waddell.

THE HEALTH STATISTICS OF THE METROPOLIS DURING THE YEAR 1856.—With a population of 2,616,248, London has suffered a mortality of 56,786; 28,894 males died, and 27,892 females. By comparison with former years, the public health in 1856 was unusually good. During the last ten years the annual deaths in London have been, on the average, 25 per 1000 of the population; whereas in 1856 the proportion was 22 per 1000. The mortality was lower than in any year of the ten except 1850, when it was slightly less than 21 per 1000; but this proportion might in great measure be accounted for by the fact that the epidemic of the two preceding years had weeded the population of its weaklier members. The mean mortality of the 10 years being 2.495 per cent., we may thus distinguish between the healthy and unhealthy years by the per-centage of mortality.

	1847.	1848.	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.
Healthy years ..	..	..	..	2.094	2.340	2.247	2.441	..	2.406	2.178
Unhealthy years	2.710	2.583	3.008	..	..	..	..	2.938	..	..

LOCAL RESULTS.—But the above improvement in health was participated in, in various degrees, by the different districts of London. In each of the five general districts, however, into which London is divided, the mean mortality was under the average per-centage of the ten years. Thus :—

	Area in Square Miles.	Mean Mortality of 10 Years.	Mortality per cent., 1856.	Living to One Death Annually.
West	16.9	2.313	2.097	43
North....	21.1	2.257	2.069	44
Central ..	2.9	2.484	2.193	40
East	9.7	2.634	2.286	38
South....	71.2	2.689	2.211	37
	121.8	2.495	2.178	40

It is also assuring to find that in respect to the 36 sub-districts, notwithstanding the increase of population, in only one has the mortality numerically increased to any extent, that district being St. George's in the East.

NEW CHAIR OF VEGETABLE PHYSICS AT THE MUSEUM OF NATURAL HISTORY OF FRANCE.—M. Ville has just been nominated to this chair, and the following is an extract from the report of the Minister of Public Instruction on the occasion of its establishment :—"M. George Ville, following the traces of Priestley, Ingenhous, and Duhamel, has courageously pursued a course that no sacrifice has been able to arrest. A special laboratory, prepared at great cost, and furnished with apparatus exhibiting the most ingenious conceptions, enabled him to undertake decisive experiments upon the phenomena which concur in the formation of plants; to discern with precision what are the elements plants attract from the atmosphere, what are those which they extract from the earth, and what are those they leave behind; to measure all that influences the development of the plant; to snatch from nature the secrets of those infinite combinations of which vegetation is the centre; and to establish rational principles in the employment of fertilising agents. Such has been M. Ville's self-imposed task. Notable results have already led to the appreciation of the justice of his previsions, the exactitude of his procedures, and his profound acquaintance with the different branches of science he has summoned to his aid. M. Ville thus seems naturally designed for the inauguration of this new chair."

SIR JAMES WILEY, THE LATE CZAR'S PHYSICIAN.—Walter Channing, an American, has just published a work called "A Physician's Vacation, or a Summer in Europe." The following extracts are interesting:—"Upon entering the room, my whole attention was attracted by the figure of a very tall old man, between eighty and ninety, stretched at full length on a sofa. His face was harsh, hard, solid. You would never have thought him so very old, for these faces wear well—the skin keeps smooth, the features preserve place, and so have their earlier symmetry. But the expression was singularly disagreeable. It seemed made up of physical suffering and moral displeasure. Sir James's dress was in keeping with expression. He wore an old, faded, much-soiled, printed calico dressing-gown. Its acquaintance with the laundry could not have been recent. His long neck, which in men, especially old men, is rarely beautiful, was bare, while the smallest possible portion of shirt here and there showed itself. . . . An officer came in, who was introduced to me as the physician to the Empress, Colonel Carrell. He was splendidly dressed. His uniform was white—snow white—fitting him perfectly. His epaulettes, sword-hilt, scabbard, sword-belt, hangings, were of the brightest burnished silver. He stood at rest with his hat in his hand, as handsome a man as you will see in a thousand. I said stood, for nobody sat in the presence of the head of the Military Bureau of the Imperial Army. After some very pleasant talk, I took my leave. At another visit, Sir James talked of his war experiences. Among other things, he spoke of the battle of Leipsic. Moreau, who was then fighting on the side of the Allies, had both his legs shot off by a cannon-ball. Sir James amputated both limbs upon the field, but such was the shock which Moreau had received from the ball, that he survived but a few hours after the operation. It was in connexion with the service rendered by Sir James in that battle, that he was made a baronet, with the privilege of armorial bearings. He told the servant to bring him the patent of his baronetcy, signed by the English monarch, which it was evident he was happy to show me. In connexion with this, was a display of all the decorations and orders which he had received from the many monarchs he had served. . . . Something was said of the interest which would be taken in the history of such a life. Sir James said that he had written a work, in many volumes, of every important event in which he had taken part. It was finished for the press. But he thought it his duty to the Czar to tell him what he had done. Nicholas begged him to destroy it; and with so much emphasis was the request made, that he promised to comply with it, and had performed his promise. The record of a long life, which had been spent in the active and responsible service of four monarchs, and in the most important portions of Russian history, which, in fact, embraced most literally the whole existence of that empire, was, in a moment, destroyed. . . . Sir James gave me copies of his published works. Among these was a thick volume on the *Materia Medica* of Russia. The day before I left St. Petersburg I called to make my visit of leave. I found him very ill. He had passed a wretched night, and was breathing with so much agony, and was so exhausted, that he could hardly raise his hand to me, or say farewell. He was stretched out on the sofa, as he was when I first saw him, and it seemed impossible that he would ever rise from it again. I thanked him for all the kindness he had showed me, and took my leave. It was not without sadness, this leave-taking at the borders of the grave."

MORTALITY NOTABILIA.—The total number of deaths registered in London, which in the previous week was 1175, was in the week that ended last Saturday 1156, showing again a decrease, which has been maintained during the last five weeks, and which in circumstances as favourable as those of the present time is to be expected towards the end of the first quarter of the year. In ten years the average deaths in the weeks corresponding with last week raised, for increase of population, is 1315, and shows that the public health is at present decidedly better than usual. The deaths referred to diseases of the zymotic character were last week 217; the corrected average of corresponding weeks is 245. The Southern division, namely, all that part of London which lies on the south side of the river, is at present unusually free from epidemics. Bronchitis was fatal last week in 135 cases; pneumonia in 100; the mortality from the latter disease now becoming greater relatively to that of the former.

BIRTHS.—The births of 858 boys and 786 girls, 1644 children, were registered; average 1606.

METEOROLOGY.—The mean height of the barometer in the week was 29.607 in. The *highest* reading in the week was 29.92 in. on Thursday. The mean temperature of the week was 37.2°, which is 3.3° below the average of the same week in 43 years. On Wednesday the mean temperature was only 33.3°, which is 7° below the average. The *lowest* temperature occurred on Tuesday, and was 28°; the *highest* was 56.6°, and occurred on Saturday, the only day on which the mean temperature was above the average.

THE following are the number of Deaths from Small-pox, Measles, Scarlatina, Hooping-cough, Diarrhoea, and Typhus, in the several Districts of London, for the past Week:—

	Popula- tion.	Small- pox.	Measles.	Scar- latina.	Hoop- ing- Cough.	Dia- rrhoea.	Ty- phus.
West.....	376,427	1	4	3	16	..	5
North	490,396	3	9	8	9	3	11
Central ..	393,256	2	7	2	16	..	2
East	485,522	..	6	7	21	4	12
South	616,635	..	1	4	10	2	8
Total..	2,362,236	6	27	24	72	9	38

DEATHS IN PUBLIC INSTITUTIONS for the Weeks ending Saturday, March 14:—

	In the Week ending Mar. 7.			In the Week ending Mar. 14.		
	Males.	Females.	Total.	Males.	Females.	Total.
Workhouses.. ..	50	62	112	57	52	109
Prisons .. ..	..	1	1	1	..	1
Military and Naval Asylums ..	9	..	9	7	..	7
General Hospitals	48	23	71	24	20	44
Hospitals for Special Diseases ..	4	2	6	3	4	7
Lying-in Hospitals .. ..	..	..	..	..	1	1
Military and Navy Hospitals ..	6	..	6	2	..	2
Hospitals and Asylums for For- eigners .. ..	..	1	1	1	..	1
Lunatic Asylums	6	2	8	6	3	9
	123	91	214	101	80	181

DEATHS REGISTERED in the Metropolis for the Week ending Saturday, March 14, 1857.

CAUSES OF DEATH.	In the Week ending Saturday, Mar. 14, 1857.						Averages of Temperature and Deaths in 10 Weeks.
	Deaths of Persons.						
	AT ALL AGES. Mean temp.	Under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.	At 80 Years of Age and Upwards.	
Mean Temperature	37.2						41.0
ALL CAUSES	1156	601	138	185	181	51	1199.4
SPECIFIED CAUSES	1153	600	138	184	180	51	1189.4
DISEASES:—							
1. Zymotic Class	217	179	13	10	13	2	222.5
2. Dropsy, Cancer, and others of uncertain seat	55	7	8	20	19	1	52.0
3. Tubercular Class	194	75	68	39	12	..	211.9
4. Of Brain, Nerves, etc. ..	117	58	10	20	24	5	132.5
5. Of Heart, etc.	53	9	6	16	20	2	45.9
6. Of Respiratory Organs ..	263	149	17	46	42	9	258.1
7. Of Digestive Organs ..	65	30	5	17	13	..	62.3
8. Of Kidneys, etc.	10	2	2	3	1	2	15.7
9. Of Uterus; viz.—Puer- peral Disease, etc. ..	12	1	7	2	1	1	7.7
10. Of Joints, Bones; viz.— Rheumatism, etc. ..	9	5	1	2	1	..	7.9
11. Of Skin, etc.	12	1	..	..	..	1	2.6
12. Malformations	8	8	..	..	..	..	3.3
13. Debility from Premature Birth, etc.	26	26	..	..	..	..	29.7
14. Atrophy	34	27	..	2	5	..	29.5
15. Age	48	..	..	..	22	26	54.8
16. Sudden	11	7	..	2	2	..	12.9
17. Violence, Privation, etc...	29	16	1	5	5	2	40.1
CAUSES NOT SPECIFIED.. ..	3	1	..	1	1	..	10.0

BOOKS RECEIVED.

- The Metaphysicians. London. 1857.
 The Functions and Disorders of the Reproductive Organs. By W. Acton. London. 1857.
 American Journal of the Medical Sciences, January, 1857.
 American Journal of Dental Science, January, 1857.
 A Contribution to Comparative Pathology. By J. S. Gaugée. London. 1857.
 The Speculum: its Moral Tendencies. London. 1857.
 On Spinal Deformity. By S. Hare, F.R.C.S. Second Edition. London. 1857.
 Torquay, in its Medical Aspect. By C. Radclyffe Hall, M.D. London. 1857.
 The Crystal Palace Magazine, February and March, 1857.
 The Fevers of the United States. By E. Bartlett, M.D. Philadelphia. 1856.
 The North American Medico-Chirurgical Review, January 7, 1857.
 Surgical Cases. By G. H. Gay, M.D. Boston. 1856.
 Muspratt's Chemistry. Part XXX. Glasgow. 1857.
 L'Echo Médical. No. I. Neuchâtel. 1857.
 The General Saturday Half-Holiday. London. 1857.

TO CORRESPONDENTS.

- J. O. L.*—It is simply a mixture of chloroform and spirits of wine, and is used constantly. Some mucilage should be added to it when mixed with water.
- Anti-Humbag* should say how he knows that the gentleman named was the author of the puffing paragraph he quotes from the *Hampshire Telegraph*.
- Gryphon*.—Lyell's Geology. As to the Indian works, our Correspondent should see the lists of Smith, Elder and Co., Cornhill; and Madden, Leadenhall-street.
- An Inquirer* should say how long ago the "violent attack of influenza" occurred.
- An Apprentice*.—Silica is the oxide of silicon, one of the non-metallic elementary bodies, and is insoluble in water. It is rendered soluble by uniting with potash, and in this state of chemical combination it is introduced into the tissues of plants.
- Mr. B. R.*—When one practitioner is called in suddenly to attend a case of accouchement for which another has been engaged, it is usual to share the fee between the two practitioners, if they are strangers to one another; but if they are friends, or residing in the same locality, we think that the Medical gentleman originally engaged should retain the fee. He would have an opportunity of repaying the obligation upon some other occasion.
- A Young Chemist*.—It is not easy to give a clear and comprehensive definition of the term *catalysis*, but it may be stated generally to be a process in which at least two substances are engaged, and one undergoes some changes by the agency of another, which remains unchanged. The operation of yeast in producing fermentation is an instance; the yeast undergoes no change, but the sugar in the fermenting body is converted into alcohol and carbonic acid.
- A Layman*.—It is impossible to prove by statistics the exact addition made to the average duration of human life by Medical science. That a greater longevity is really attained by such means there can be no doubt; but there are so many disturbing influences of sex, climate, predisposition, and personal habits, to be taken into account in any such investigation, that strict mathematical accuracy is unattainable.
- Mr. R. Jones*.—Dr. Jenner received £30,000 from the British Government for the discovery of Vaccination as a protective against Small-Pox.
- The Proof of Dr. Robert Lee's Lumenian Lecture had not arrived at the hour of going to press.
- Papers and Letters are in type from Dr. Priestley, Mr. Jones of Jersey, Dr. Lees, Dr. Aitken, Dr. Child, &c.
- Mr. Lord's* letter on Poor-law Medical Reform was in type last week, but was unavoidably postponed. As it has since appeared in other journals, we are compelled to adhere to our rule of not admitting communications sent to more than one journal.
- Mr. Berkeley Hill*.—The delay in Dr. Jeuner's last plate was purely accidental. One of the principal men at the colour printer's was taken ill on the day before publication, and the plate could not be supplied, although it was promised faithfully.
- R. S. V. P.* should send his name and address, and a private note shall be forwarded to him.

Dr. Armstrong.—Many thanks. We are glad to see the Protection Association are working on.

RECENT ACCIDENT FROM CHLOROFORM.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In commenting on a fatal case of the administration of chloroform to a boy, in your last week's journal, you state that several such instances have occurred, and refer, among others, to that of an infant under the care of Aschendorf. As this is the only case on record (as far as I know, and I have searched carefully) in which death has been attributed to chloroform administered to an infant, allow me to remind you that it has been clearly shown by Dr. Snow that such an opinion rested on no foundation in this instance. He says (a):—"Dr. Aschendorf has attributed to chloroform the death of a child a year old, from whose face and neck he extirpated a large naevus, which extended from the zygoma to the os hyoides, and from the external auditory meatus to the maxillary fossa. No one else had been willing to undertake its removal. The operation lasted eighteen minutes, and only 9 drops of chloroform were used in all. The child died suddenly at the end of the operation. As no chloroform had been applied for eight minutes before death, and then only 3 drops, it is quite impossible that this agent could have been the cause of the fatal result, and it only seems curious that the operation did not suggest itself to Dr. Aschendorf, as affording a sufficient explanation of the event." *Vide* "Caspar's Wochenschrift," September 6, 1850.

Vigo-street, March 17.

I am, &c.

T. HOLMES.

(a) London Journal of Medicine, 1852, "On the Causes, and Prevention of Deaths from Chloroform."

Dr. Goodwin will find the information he requires on the Ophthalmoscope in the numbers of this Journal for September 10, 1853, February 10, 1855, and in our Second Volume for 1854. Dr. Frank's Ophthalmoscopic Sketches in our last Volume contain the results of the most recent observations with this instrument.

COMMUNICATIONS have been received from—

Dr. MONTGOMERY; Dr. FARADAY; Dr. HALL; Dr. SNOW; Dr. WEBSTER; Dr. MUNK; Dr. G. HEWITT; Dr. AITKEN; Mr. WITTEN; Dr. LANKESTER; A. G.; Dr. ZONDER; Mr. BROWN; Mr. CHARRIERE; Mr. STEVENS; Mr. W. STEPHENS; J. O. L.; Dr. LOWES; Mr. ACTON; Dr. HILLIER; Dr. CHILD; Dr. GROSSE; Dr. T. RICHARDSON; Mr. GAMGEE; Mr. M'DERMOTT; Mr. HUGHES; Mr. MORRIS; Mr. DRAKE; Mr. GOVER; ECCE HOMO; Mr. FENTON; Mr. C. HEATH; Dr. RUSSELL; Mr. H. WESTON; Mr. STOKES; Mr. ROGER; Mr. M'SORLEY; Mr. R. SHAW; Mr. GREENWOOD; Mr. PARIS; Mr. ALDRED; Mr. C. HANBURY; Mr. S. ROBERTS; Dr. NOBLE; Mr. E. JACKSON; Mr. E. PEARL; Mr. G. LAMB; Mr. J. GOODLAD; Mr. KING; Dr. M'WILLIAM; Mr. TAYLOR; Mr. A. MONTGOMERY; Mr. STUART; Mr. J. RICHARDSON; Mr. DENT; Mr. BREMBRIDGE; Dr. GARROD; Mr. CAMPDEN; Dr. COCKERELL; Dr. DEVENISH; Dr. LADD; Mr. WHITEHEAD; Dr. ARMSTRONG.

APPOINTMENTS FOR THE WEEK.

21. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; Westminster, 1 p.m.; King's, 2 p.m.; Charing Cross, 1 p.m.
 ROYAL COLLEGE OF SURGEONS, 4 p.m.: Professor Busk.
 MEDICAL SOCIETY OF LONDON, 8 p.m.: Mr. B. Brodhurst, "On the Treatment of Lateral Curvature of the Spine."
 ROYAL INSTITUTION, 3 p.m.: Professor Phillips, "On Limits of Variation in the State of the Globe—Internal Heat."
 ROYAL BOTANIC SOCIETY, 3¼ p.m.

22. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.; Orthopaedic Hospital, 3 p.m.

23. Tuesday.

Operations at Guy's, 1 p.m.
 ROYAL COLLEGE OF SURGEONS, 4 p.m.: Professor Busk.
 ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m.: Mr. Solly's Case of Double Talipes Varus, in which the Cuboid Bone was partially removed from the left foot.
 ROYAL INSTITUTION, 3 p.m.: Professor Huxley, "On the Principles of Natural History."
 ZOOLOGICAL SOCIETY, 9 p.m.
 METEOROLOGICAL SOCIETY, 7 p.m.

24. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopaedic Hospital, 3 p.m.
 ROYAL COLLEGE OF PHYSICIANS—Lumenian Lectures, 4 p.m.: Dr. Robert Lee, "On the Structure, Physiology, and Diseases of the Uterus."
 HUNTERIAN SOCIETY, 8 p.m.: Dr. Peacock, "On the Diagnosis of some Forms of Tuberculous Disease."
 GEOLOGICAL SOCIETY OF LONDON, 8 p.m.

25. Thursday.

Operations at St. George's, 1 p.m.; Middlesex, 12½ p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.
 ROYAL COLLEGE OF SURGEONS, 4 p.m.: Professor Busk.
 ROYAL SOCIETY, 8½ p.m.
 ROYAL INSTITUTION, 3 p.m.: Professor Tyndall, "On Sound."

26. Friday.

Operations at the Moorfields Ophthalmic, 10 a.m.; Westminster Ophthalmic, 1½ p.m.
 ROYAL INSTITUTION, 8½ p.m.: R. Warington, Esq., "On the Aquarium."

ORIGINAL LECTURES.

LECTURE

ON

THE STRUCTURE AND PHYSIOLOGY OF THE OVARIA.

BEING ONE OF THE LUMLEIAN LECTURES READ BEFORE THE

Royal College of Physicians, April, 1856.

By ROBERT LEE, M.D., F.R.S.

MR. PRESIDENT,—In the year 1830, the Croonian Lectures were delivered here by Dr. Seymour, and soon afterwards published as a separate treatise, which was entitled, “Illustrations of some of the Principal Diseases of the Ovaria, their Symptoms and Treatment; to which are prefixed, Observations on the Structure and Functions of these Parts in the Human Being and in Animals, with fourteen Lithographic Engravings.” The dissections then made to illustrate the comparative anatomy of the ovaria in birds, crocodiles, snakes, tortoises, fishes, and sharks, were deposited in the Museum of the College of Physicians, and the valuable original drawings were presented to the Museum of St. George’s Hospital. I am now enabled, through the kindness of Dr. Seymour, to place before you these preparations and coloured drawings, and to avail myself of their aid, while I now endeavour to describe the structure and physiology of the human ovaria. Dr. Seymour’s treatise contained an accurate account of all that was then known on these subjects, his work has been referred to by subsequent writers, and it has since held a distinguished place in medical literature.

More than a quarter of a century has elapsed since these lectures were delivered in this theatre, and during the whole of that period the investigation of the anatomy and physiology of the human ovaria, before and subsequent to impregnation, has been prosecuted with the greatest activity, and the most signal success, both in Great Britain and on the continent of Europe, whereby various important contributions have been made to our knowledge. Of these perhaps the most striking are, first, the complete discovery of the unimpregnated ovum, within the Graafian vesicle, an organized structure in which the body of man originates, and the point in which human life first manifests its presence. Secondly, the discovery that unimpregnated human ova escape periodically from the ovaria, by the spontaneous opening or bursting of the Graafian vesicles, and that all the phenomena of menstruation are connected with this process, or actually dependent upon it.

In considering the structure and physiology of the human ovaria before and after impregnation, it is necessary to trace the progress of discovery in this branch of science, in order fully to appreciate the difficulties which have been encountered and overcome by those who have devoted their lives to these researches, and the importance of their results; and likewise in compliance with the admonition of the immortal Harvey, who says that it is proper to notice “the labours and conclusions of those, to the extent that the love of truth will allow, who bore the torch that has lighted us to the shrine of philosophy.” “Priscorum autem virorum, et antiquitatis ipsius reverentia nos monet, ut quantum veritas patitur illorum dogmata tueamur: neque enim decet, eorum opera et statuta temere despiciere, aut floccifacere, quorum prolata face, ad philosophiæ adyta pertingimus.”—P. 451.

The human ovaria were wholly unknown to the ancients, and by whom their actual existence was first discovered has not been clearly ascertained. The organs upon which all the peculiarities of the human female depend,—the pelvis, mammae, menstruation and conception,—and from which the whole human race, since the creation of man, has proceeded or taken their origin, were probably the last organs which were discovered in the human body and their functions determined. Vesalius was acquainted with the general appearance of the ovaria, and their situation behind the uterus, and described the vesicles which are always found imbedded in their parenchymatous structure, or stroma, as it is now called, but he was entirely ignorant of the functions they perform. Fallopius was not merely acquainted with their external form, and the vesicles they contain, but he corrected the

general opinion which then prevailed respecting their use in the animal economy, and first pointed out the peculiar connexion which they have with the fimbriated extremities of the Fallopian tubes, as seen in this preparation (showing it). “Omnes anatomici,” he says, “uno ore asserunt, in testibus foeminarum semen fieri, et quod semen referri reperiantur: quod ego nunquam videre potui quam vis non levem operam ut hoc cognoscere adhibuerim. Vidi quidam in ipsis quasdam veluti vesicas aqua vel humore aqueo, alias lutea, alias vere lympho turgentes.”

Fallopius imagined that the tubes, which are now named after him, were formed by nature for the purpose of conveying away from the cavity of the uterus some putrifying fluid, which he supposed was generated there during menstruation: an opinion which may be adduced as a proof that, at the time he lived, nothing whatever was known respecting the functions of the ovaria and Fallopian tubes, or the process of human reproduction.

Harvey’s Work, “De Generatione Animalium,” which contained the results of many years’ elaborate inquiry, appeared in 1651; but it did not contribute in the slightest degree to the advancement of this branch of anatomy and physiology; for when Harvey affirmed that all animals spring from an egg, “omnia ex ovo,” he referred to the impregnated ovum, consisting of the embryo and its membranes, which he saw within the uterus, and not to the unimpregnated ovum formed within the Graafian vesicle in the substance of the ovary. Of the ovum, in man or in the lower animals, before entering the uterus, he had no knowledge, and it is most extraordinary that, in the numerous experiments made by him upon the deer, through the kindness of Charles I., the remarkable changes which take place in the ovaria after conception should have wholly escaped his observation. The following passage proves this:—“In the deer, as well as in the sheep, goat, and bisulcate animals generally, we find testicles; but these are merely little glands, which rather correspond in their proportions to the prostate or mesenteric glands, the use of which is to establish divarications for the veins, and to store up a fluid for lubricating the parts, than for secreting semen, concocting it into fecundity, and shedding it at the time of intercourse. I am myself especially moved to adopt this opinion, as well by numerous reasons which will be adduced elsewhere, as by the fact, that in the rutting season, when the testes of the buck and hart enlarge and are replete with semen, and the cornua of the uterus of the hind and doe are greatly changed, the female testicles, as they are called whether they be examined before or after intercourse, neither swell nor vary from their usual condition—they show no trace of being of the slightest use either in the business of intercourse or in that of generation.” Harvey asserted that conception takes place within the uterus, but that he was not thoroughly satisfied of the truth of the doctrine he taught may be inferred from the fact that he has repeatedly put the question, “Does conception take place in the uterus, as we see by the eye and think with the brain?”

Harvey died in 1657, and Milton in 1674. The poet must have been acquainted with the work on the Generation of Animals, and must have felt how little Harvey had accomplished in removing the veil which covered the origin of man and all living beings. This knowledge of the imperfect state in which the subject had been left might, perhaps, have led to the following lines in *Paradise Lost*:—

“For man to tell how human life began
Is hard; for who himself beginning knew?”

Twenty-one years after the publication of Harvey’s work, “De Generatione Animalium,” in 1672, De Graaf’s treatise appeared, which was entitled, “De Mulierum Organis generationi inservientibus tractatus novus; demonstrans tam Homines et Animalia cætera omnia, quæ vivipara dicuntur, haud minus quam ovipara ab ovo originem ducere.” This work contained the first accurate anatomical description of the human ovaria and the functions they perform. In it he showed that the peritonæum invests the parenchymatous substance, which constitutes the greater part of the organs in which vesicles are embedded; and he pointed out the fact that each of these vesicles, distended with a clear fluid, consists of two membranes, and that these are supplied with blood-vessels and nerves; and that vesicles, similar to those found in the human ova, were met with in the ovaria of all the animals that he had examined,—in birds, fishes, in oviparous and viviparous

animals, rabbits, hares, hogs, sheep, cows, in the doe, wolf, ass, and even the mule. These vesicles had been called ova by Van Horn, a term which De Graaf adopted, "propter accuratam similitudinem quam cum ovis in ovium ovario contentis obtinent," p. 180. These ova, he said, were generated and perfected in the ovaria, evidently in the same manner as the yolk is produced in the ovary of birds. "Communis itaque femellarum testiculorum usus est."—"Ova generare, fovere, et ad maturitatem promovere: sic ut in mulieribus eodem, que volucrum ovario munere fungantur; hinc potius mulierum ovaria quam testes appellanda venient." All subsequent researches have proved that the function here assigned to the ovaria is the true function of the organs, and that the vesicles, if not actually ova, are ovisacs, in which ova are formed and preserved in a state fit for impregnation. De Graaf first pointed out the striking differences in structure between the ovaria and the male testes, and he described the condition of the ovaria in early and advanced life. In infants, he says, the ovaria weigh from five grains to half a scruple. At the age of puberty half a drachm, and a scruple in old age. He has not stated that the peritonæum covering the ovaria is always smooth before the age when menstruation has commenced, but he knew that cicatrices were always visible on their surface after the age of maturity, the cause of which was not discovered until more than 150 years had passed away.

To De Graaf we are likewise indebted for the discovery, and first description and delineation, of the striking changes produced upon the ovaria by impregnation, which had wholly escaped the observation of Harvey, and all other anatomists who lived before him. Of these appearances in the ovaria he gave the following account:—"Quæ vero secundam naturam aliquando tantum in mulierum testibus inveniuntur: sunt globuli, qui glandularum conglomeratarum ad instar ex multis particulis à centro ad circumferentiam recto quasi ductu tendentibus conflantur, et propria membranâ obvolvuntur. Hos globulos non omni tempore in femellarum testiculis existere dicimus: quia post coitum tantum in illis deteguntur, unus aut plures, prout animal ex illo congressu unum aut plures fœtus in lucem edet. Neque illi adhuc in omnibus aut ejusdem generis animalibus semper eodem modo scse habent: in vaccis enim flavum, in ovibus rubrum, in aliis cineritium colorem sortiuntur: præterea aliquot post coitum diebus tenuiori substantia prodiiti sunt, et in sui medio limpidum liquorem membranâ inclusum continent, quoniam cum membranâ foras propulso, exigua solum in iis capacitas superat, quæ sensim ita aboletur, ut postremis gestationis mensibus ex solida tantum substantiâ conflari videantur, enixo jam fœtu globuli illi rursus imminuuntur, ac tandem evanescent."—P. 178.

In this passage it is stated from observation, not from hypothesis, that in the ovaria, after impregnation, there are found globules or masses, resembling conglomerate glands; that these are not seen except after impregnation, and that the number of these bodies corresponds with the number of fœtuses found in the uterus; that these bodies do not present the same appearance in all animals; that they are of a yellow colour in the cow, red in the sheep, and in other animals of a grey colour. It is not said that they are of a yellow colour in the human ovaria; but it is stated that these globular bodies, resembling conglomerate glands, contain a limpid fluid inclosed in a membrane, which, along with the membrane, is ultimately excluded from the ovaria, a small space only being left, which is gradually obliterated; and that in the latter months of gestation these bodies only consist of a solid substance, which finally disappears as gestation advances.

Malpighi, one of the most celebrated anatomists of that age, was the first to contradict these statements. He maintained—upon what evidence does not appear—that these globules in the ovaria, which he named corpora lutea from their yellow colour, were formed anterior to conception, and that their formation was, in fact, necessary, in order to enable the ovum to become fecundated. Valisnieri, a distinguished professor at Padua, after dissecting the ovaria of viviparous animals, concluded that the glandulosa substantia, or corpus luteum, is not generated only after the ovum is fecundated, but long before, developing itself by degrees, and becoming matured, in order to assist in forming the ova. After this, Bertrandi stated that he had taken three female guinea-pigs from the mother, and kept them separated from the male fifteen

months, when he killed them, and in every one of these animals found corpora lutea in a progressive state. From these observations he inferred that the corpus luteum is formed in animals at the time of puberty, as preparatory to impregnation. Santorini, another great anatomist, added his testimony in confirmation of the accuracy of these erroneous and unfounded opinions.

"It would not be reasonable to suppose," says Dr. Seymour, "that a point of so much importance in the process of generation as the formation of the corpora lutea should have escaped the observation of Buffon; and, accordingly, we find that he devoted much time and attention to the subject. His theories of generation, however, very largely partook of the defect which, in philosophical inquiries, too often arises from the predominance of brilliant imagination over calm judgment—a predominance characteristic of the nation of which M. de Buffon was so distinguished an ornament. Buffon adopted the observations of Valisnieri, etc., as far as related to the formation of the corpora lutea, independently of impregnation; but, dazzled by the vaunted discoveries of Hartsœcher and Lewenhœck with regard to spermatic animalculæ, he conceived that a similar fluid was secreted by the corpora lutea in the female. To ascertain this he instituted an experiment with the celebrated Needham (Phil. Trans. for 1748, p. 615), the success of which he conceived would set the question at rest. Having strangled a bitch at heat, he found a corpus luteum in each ovarium, and having divided each carefully, collected the fluid which escaped from the wound. This fluid, when subjected to microscopic observation, showed the presence of numerous animalculæ. The triumph of the naturalist was complete—a triumph which the subsequent discovery of animalculæ in animal and vegetable infusions, and the still later experiments of Spallanzani, effectually destroyed; and the opinion has long since rested, with so many other brilliant but striking theories, in deserved oblivion."

Haller made many observations upon the sheep, but in no instance did he see a corpus luteum, except as the result of impregnation. He opened above 100 bodies of women, in which he saw ten corpora lutea; but in none, except in pregnant and puerperal women, did they exist.

"These corpora lutea are proved," says Sir E. Home, "to be the glandular structure which forms the ovum, and, when the ovum is expelled, gradually disappears. Till now these bodies have always been considered as the effect, and not the cause of impregnation; so that, without impregnation, there would neither be ova nor corpora lutea, and the presence of that body was allowed to be an undeniable mark of conception having taken place. This error must have arisen from the circumstance of their being almost always in the ovarium of a woman who dies in child-bed a corpus luteum preparing another ovum to be ready for future impregnation, which was usually mistaken for that belonging to the child born; whereas the former corpus, in the course of nine months, had nearly, if not entirely, disappeared."

Discordant opinions still continue to prevail among anatomists and physiologists respecting the structure and formation of the corpus luteum. Dr. Baillie deposited in the Museum of the College of Physicians some beautiful injected preparations of the human corpus luteum, in the early months of pregnancy, which are now placed before you, with the whole series of preparations of the corpus luteum at the different periods of utero-gestation subsequent to delivery; and those found in the ovaria of women who had never been pregnant, from my collection in the Museum of St. George's Hospital, and coloured drawings, in which the appearances presented by the corpus luteum in the recent state have been accurately delineated. From a careful examination of all these preparations and drawings, it appears that, during the first three months of pregnancy, the human ovarium, from which the fecundated ovum has been discharged, and which contains the corpus luteum, is readily distinguished from the other ovarium by its greater size and weight, and by a prominence on some part of its surface above the adjacent peritonæum. On the point of this projection there is always a small irregular depression or cavity, where the peritonæum appears to be torn. Numerous arteries and veins ramify around this prominence, and give it a red colour. On cutting open the ovarium in the long direction, the corpus luteum comes into view, which is of an oblong form, rather more than half-an-inch in length, and less than a quarter of an inch in thickness; it presents

an entirely different appearance from the stroma of the ovary, and is wholly different from it in structure, and from every glandular part of the body. It is obvious that the corpus luteum is nothing but the empty Graafian vesicle which contained the ovum, surrounded by a layer of yellow granular substance, which is formed subsequent to impregnation. The two coats of the Graafian vesicle are seen inclosed within the yellow substance; and they can be separated from one another, and their existence as two distinct membranes as clearly demonstrated, as the amnion and chorion. The innermost of these membranes is smooth, and the outer rough and filamentous, and processes are sent out from their exterior layer, which penetrate the yellow substance to a considerable depth, and in some parts go quite through it to the stroma of the ovary. The cavity of the Graafian vesicle varies in size in different corpora lutea; in some it is entirely empty, in others it is filled with a clear, serous fluid; but I have in no instance seen the cavity of the corpus luteum, resulting from impregnation, filled with blood or "lymphatic matter" of any description. The layer of yellow substance, which has in the second month of pregnancy a deep orange colour, is usually from a line to a line and a half in thickness, and, when examined with a magnifier, appears to consist entirely of yellow granules contained in the cellular membrane, interposed between the outer surface of the Graafian vesicle, and the stroma of the ovary. Blood-vessels pass through the yellow substance, from the stroma of the ovary to the coats of the Graafian vesicle. In some of these specimens there is an irregular and unusually large quantity of yellow matter formed on one side of the Graafian vesicle, which causes it to press inward upon the cavity. The outer surface of the yellow matter is seen in all the preparations in immediate contact with the stroma of the ovary, which is sometimes closely condensed, so as to produce the appearance of a capsule around it. This condensed portion of the stroma of the ovary is often thicker than both coats of the Graafian vesicle, and the mouths of divided vessels are distinctly perceptible in it, as in other parts of the substance of the ovary. In some specimens there is no condensation of the substance of the ovary around and in contact with the yellow matter, nor the slightest appearance of any capsule enclosing it.

As gestation advances the corpus luteum is found gradually to diminish in size, the deep yellow colour fades, the coats of the vesicle contract, and in the fifth month the cavity is sometimes almost obliterated. In the seventh and eighth months of pregnancy, there is no cavity seen usually within the corpus luteum; the coats of the Graafian vesicle have contracted still further, and assumed a white membranous appearance, with small processes passing outward through the yellow matter, somewhat like radii from the centre of a circle. A still further diminution takes place in its size, and in three or four months after delivery the yellow matter and coats of the Graafian vesicle have generally been entirely removed by absorption from the ovary, and, except a small depression on the surface where the prominence had at first existed, and a slight condensation of the substance of the ovary beneath, there is no vestige left of the corpus luteum.

A corpus luteum is invariably formed in the ovarium after conception, and two or three where there are twins or triplets, as De Graaf first stated, and as he had frequently observed in the lower animals. Not unfrequently two corpora lutea are present in the ovaries when there is only one ovum within the uterus. Upon the table there is a perfect corpus luteum with the structure above described, which I removed from the body of a woman who died from inflammation of the uterus in St. George's Hospital soon after the expulsion of a mass of serous cysts, or hydatids as they are usually called, from the cavity, and I believe these cysts are never produced within the uterus except as the result of impregnation. Corpora lutea, such as have never been described and delineated, may be regarded as furnishing the most unequivocal proof of impregnation, but there are two preparations before you which prove that conception may take place, and that the corpus luteum may be so small and so imperfectly formed as to be in a great degree destitute of its genuine and distinctive characters. To have inferred that these were the result of pregnancy would not have been justifiable had an ovum not been found within the uterus or recently expelled from its cavity.

The discovery of the corpus luteum was probably made by

De Graaf in the lower animals, especially the cow and sheep, and he enjoyed few if any opportunities of examining the human corpus luteum at the earlier periods of pregnancy. In his treatise there is no delineation given of the human corpus luteum at any period of utero-gestation, and there is no allusion made to the fact since discovered, that in the ovaria of women who had never been pregnant, appearances have frequently been observed, resembling more or less, in form and colour, corpora lutea, the undoubted result of impregnation. Preparations and coloured drawings of these false corpora lutea, as they are usually called, are now placed before you, and their structure and mode of formation clearly seen. Two of these were found in the ovaria of women who died during menstruation. In the greater number of these the appearances were produced by blood extravasated within the Graafian vesicles, which had assumed a fawn or yellow hue, as the colouring matter disappeared by absorption, and underwent various changes similar to those which are observed to take place in coagula of blood formed in the cavities of veins from inflammation of the coats or mechanical obstruction. After a longer or shorter period, the blood is entirely removed, and the coats of the vesicle contract and often assume a brown, yellow, or black colour. In these false corpora lutea the yellow matter is contained within the Graafian vesicle, and is not formed around it as in true corpora lutea resulting from pregnancy. In several of the preparations before you the coats of the vesicle have assumed a yellow colour, and no blood in any state was found within them. In one there is a thin membrane seen lining the inner surface of the vesicle, and there was no blood contained within the cavity. The danger of drawing false conclusions respecting impregnation, in cases of sudden death from the condition of the ovaries without due regard being paid to the state of the uterus, might be illustrated by many cases which have occurred in medico-legal investigations.

(To be continued.)

ORIGINAL COMMUNICATIONS.

ON THE MODE OF APPLYING COLD EFFICIENTLY IN DISEASE OF THE UTERUS.

By JAMES ARNOTT, M.D.

AMONG the various remedies used in uterine affections the local application of cold holds a high place, yet none, generally speaking, is employed more inefficiently. From the situation of the uterus there is considerable art required to apply cold to it in a manner calculated to produce those beneficial effects which we are accustomed to observe when it has been applied to inflamed or irritated parts on the exterior of the body.

In an "Essay on the present state of therapeutical inquiry," published ten years ago, I recommended the application of cold to the uterus by a continuous stream of water, and I have the satisfaction to think that much benefit has been derived from the extensive use of this expedient. Still, this mode is very imperfect when the greater degrees of cold required to reduce inflammation or even irritation are desirable. It is then necessary to subject a larger surface of the organ to a lower degree of temperature.

If a wide speculum be previously introduced, or one that expands widely at its inner extremity, the advantages are at least fourfold from the greater surface exposed; and we have then, besides, the opportunity of applying pounded ice or frigorific mixtures adequate to effect our desired purpose.

The degree of cold required depends on the object it is used for. In cancer I have occasionally used a temperature of 20° below zero, and for mere functional disease the degree of cold produced by ice and common salt, or 5° below zero, will often be required. A smaller proportion of salt than is necessary

to produce this degree will, however, sometimes suffice, or even ice itself without any admixture. The appropriate degree of temperature is regulated not only by the object we have in view, but by the duration of the application, the extent of surface exposed to it, and the natural heat of the part, or vigour of its circulation. A temperature of zero applied to the uterus may not be stronger than one of 32° applied to the skin.

In the last number of the *Medical Times and Gazette* there is an account of the mode of using cold in uterine diseases employed by M. Aran, of Paris. He objects to adding salt to the ice, on account of the irritation which he says is excited by the mixture. I am a little surprised at this objection, because in former communications on the use of frigorific mixtures in uterine diseases, he spoke with unqualified praise of them, and because I have never observed the irritation mentioned by him. Care, however, has been always taken to wash out the salt by a stream of water after the frigorific application, and that no injurious pressure should be made by the instruments employed. To some neglect of such precautions the irritation spoken of by M. Aran may probably be attributed.

I shall be glad to learn, however, that ice, even without any admixture, is generally used in this way, as it is a much more efficient mode of applying cold than that generally adopted; and to this, the knowledge that a frigorific mixture of much lower temperature may be safely employed, will doubtless very much conduce. It is only a few years since our manuals of midwifery admonished practitioners to be careful how they employed ice on these occasions lest it should cause sloughing! But as the dread of destroying the vitality of a part by short congelation is not yet quite extinct, it may tend to render it so to mention, that it is not so easy a thing as many may imagine to devitalize a small portion of the trunk of the body by congelation produced by the ordinary frigorific.

We have heard much of late of the advantage of destroying cancer by caustic, instead of excising it. Let the Surgeon substitute congelation for caustic as a means of effecting devitalization, and he will find that a much greater degree of cold, and one much longer continued, is requisite than might at first be supposed. That such a mode, however, of destroying cancer would, from its painless and speedy action, be often superior to caustic, hardly admits of doubt, and it is always a useful adjuvant to escharotics for this and other purposes.

Before concluding, I shall take the opportunity of removing an objection which Dr. West makes to congelation employed for uterine cancer, in his recently published and excellent Lectures. He speaks of the difficulty of applying it, and, particularly, of the necessity of removing the patient from her bed to a couch on each occasion, and of the risk of her person being wetted by it. I have always found that the application is as easily made when the patient is in bed as on a couch; and, if the nates are raised by a pillow, there is no danger of the escape of the dissolved ice. If the speculum were introduced by a nurse (and it may, in most cases, be easily and safely so introduced), there would, I think, be no reason for regarding each application as an "operation;" besides, the relief which is generally immediately afforded by the remedy in painful disease renders any such inconvenience of no moment in the patient's estimation.

JERSEY HOSPITAL REPORTS.

By G. M. JONES, Surgeon.

CARIES OF THE HEAD OF THE FEMUR IN AN ADULT,

WITH PERFORATION IN THE PELVIS THROUGH THE ACETABULUM. EXCISION—RECOVERY.

Excision of the hip-joint having lately been performed on a boy of 14 years by Mr. Hancock, and that under most unfavourable circumstances, leads me to look upon the present time as the most opportune to give the history of a case of my own, which, in one respect at all events, appears to be analogous to that so successfully treated by the able Surgeon of Charing Cross Hospital.

Jane Holloco, aged 26, a short, stout, and delicate-looking person, was admitted into the Hospital October 17, 1853. It appears that during the early part of the preceding August, and while apparently in the enjoyment of perfect health, she was suddenly seized with excruciating pain in the left hip, and was at once incapacitated from walking or even standing. This continued so severe as to induce the lady with whom she lived in the capacity of a servant to send for medical advice. Prompt and energetic means, both local and constitutional, were at once employed (and I may here mention, for the sake of brevity and to avoid repetition, that a similar course of treatment, modified, of course, according to existing symptoms, was most assiduously persevered in for months after she became an Hospital patient), but without producing relief. Up to February there existed no external manifestation of disease. Her nights were generally sleepless, pulse small and rapid, appetite most variable, never good; thirst great, sometimes immoderately so; catamenia suppressed. At this period (February) the pain, if possible, became more severe, and was no longer as it had been, in a great measure, under the control of sedatives; pressure in the neighbourhood of the hip-joint increased it tenfold; the nates became flattened, and all the characteristic features of hip-disease were apparent, frightful bed-sores existed, and hectic symptoms became daily more apparent. It was now evident that the constitution was fast giving way, and that this formidable affection had obtained such decided mastery as to baffle every further attempt at cure, as it had resisted those already employed; even the most sanguine of my Medical friends who had watched the case with me gave up hope, and joined me in believing that no other means (save excision of the joint) could possibly afford a chance by which life might be saved.

On the 4th of May, the operation was performed in the following manner:—An incision through the integuments, commencing about two inches above the great trochanter, and carried some six inches down the thigh-bone, was first made; a semi-lunar one, with its convexity downwards, was then made, to join its upper extremity; the soft structures were then dissected on each side the bone, and the transverse semi-lunar flap reflected upwards; the head of the femur was still in its socket. When cut down on an immense quantity of ill-conditioned whey-like pus escaped from all directions. As much of the bone as presented indications of disease was now cut across with a small saw, then raised, and its remaining attachments dissected from below upwards. The acetabulum was in a state of advanced caries; every diseased portion was carefully gouged out, and the finger could easily be introduced through it into the pelvis. It was now apparent that an immense sinus extended along the ilium, and here this bone seemed almost entirely bared of its muscular structure, the upper part of the transverse incision was consequently considerably lengthened, in order to lay as much of it open as could with safety be accomplished. Very little hæmorrhage attended the entire operation. The wound, which presented a formidable appearance, was filled with moist lint. No suture, strapping, or bandage, was employed. The limb was kept in position by means of different sized cushions, and I may here remark that, at no time during the cure, were other appliances used. Chloroform was administered.

I shall bring this case to a close without entering into anything like details respecting the after symptoms or the curative means employed; suffice it to say that the patient's health slowly but gradually improved; naturally there were occasional drawbacks, and she invariably became not only weak, but a much larger quantity of pus was discharged at those periods when the catamenia ought to have appeared. The most nutritious diet, a large quantity of wine and malt liquor, together with preparations of iron and quinine were taken.

Present condition.—For the last two months the improvement in this girl's health has been most rapid and gratifying. The wounds have healed, and her general health is as good as it has ever been; she is the gayest and most lively of all the patients; in a word, she is perfectly well. A fortnight ago she was able to walk into town with the assistance of a crutch and stick; now she is able to walk about the wards with the latter alone (Feb. 21st); and there cannot exist a doubt that ere long she will discard all adventitious support. The catamenia has appeared regularly for the last three months. There is scarcely any apparent deformity of the thigh, and the shortness of the limb is about three inches.

This plate gives the correct appearance, full size, of the portion removed.



Remarks.—There are times when it almost becomes the bounden duty of a Surgeon to dissent from the authorities by which he so frequently guides his practice, and which men just commencing their career are wont to follow. The opinion of an eminent Surgeon on any point connected with his Profession should never be treated lightly; for his very eminence becomes the guarantee that he utters nothing, and more particularly publishes nothing to the world but the result of his own practice, or the fruit of mature reflection; he must be aware that thousands look up to watch and imitate him; that the views he advocates are the laws by which they are guided, while practice he denounces is almost sure to be reprobated. He has much in his power: he places his veto on a new operation, performed or recommended by the young aspiring Surgeon, one which might have become a boon to suffering humanity, but which, nipped in the bud, is thought of no more. I have been led to make these prefatory observations before dwelling on any of those points in my case which appear interesting; for Mr. Syme, of Edinburgh, to whom surgery is indebted for much that is valuable and instructive, and whose zeal and talents cannot be surpassed in many of the points connected with it, has lately written in, to say the least, very strong terms against this operation. The learned Professor, in his introductory lecture this session, makes use of the following words:—"Vehement and persevering efforts have lately been made to force into fashion two operations, which, while bloody and formidable, have the advantage of being so easy in execution, that they may be accomplished by the most inexpert of operators—I mean excision of the knee-joint, and removal of the head of the thigh-bone for disease of the hip-joint. Now, regarding the former of these procedures as on many accounts inexpedient, and the latter as not only useless but hurtful, I should not be justified in performing either the one or the other." These assertions are sweeping, and are calculated to mislead, but they are untenable, and can be easily refuted. I shall in few words dismiss the first sentence in this paragraph. To suppose that such men as Stanley (whose fault, if any can be attributed to him, is extreme caution), Fergusson, Erichsen, Walton, Buchanan, Hancock, Smith, Simon, Morris, and French are persons "to force into fashion, by vehement and persevering efforts," an operation which is not sound in principle, is by much too ludicrous to waste time in refuting. These men, with many others, form too large a majority for any leader of a minority to overthrow; they are every one of them too high-minded, too talented, and too jealous of their professional reputation

to attempt experiments for the sake of novelty or notoriety, and the standard British works on practical Surgery produce satisfactory evidence that their views are approved of, and are therefore recommended (a). Were I now writing on excision of the knee-joint (and I have had some little experience in this operation), I might bring forward cases of my own, as well as of others, which prove triumphantly the superiority in certain cases of this operation over amputation. But as regards the hip-joint, I have performed the operation twice, and have witnessed my friend Mr. Erichsen perform it once, besides which I have the joint testimony of others who have also practised it, and not once has it been considered "bloody." Neither of mine proved so, nor that under the care of the talented Surgeon of University College Hospital; and, without overstepping the bounds of truth, I can conscientiously assert, that I have witnessed more hæmorrhage in some cases of excision of the elbow-joint, and the perineal section, which I am yet to learn are stigmatised as "bloody," than in any of the three cases which have come under my immediate observation (b). There appears to me an evident contradiction in calling an operation "formidable," and stating at the same time that "the most inexperienced can easily perform it." I am perfectly willing to admit that the operation is formidable and on this very account deny the fitness of one not accustomed to the use of the knife to undertake it. If the head of the femur is displaced, the operation is rendered comparatively easy; but if it be not, then it unquestionably becomes difficult. "If the incisions were carried too far in front or behind, irreparable injury might be inflicted on nerves as well as vessels."

That "removal of the head of the thigh-bone for disease of the hip-joint is not only useless, but hurtful," is a statement altogether at variance with facts which can be brought forward to establish the contrary (c); but even supposing that only one out of twenty cases succeeded, this alone would stamp the operation as a good one. We must bear in mind this most important fact, that when we excise the elbow, wrist, knee, or ankle-joints, our object is, by carrying out conservative Surgery to save a valuable limb; but when this operation is had recourse to in hip-disease the purpose is to save life. In the former instance amputation might have accomplished this end, in the latter the alternative is this or death. Those who have an ample field for the exercise of their Profession, and even the Surgeon whose sphere of action is limited, must have witnessed the sad ravages hip disease exercises on the constitution of its victims: it is true that its first approach is generally amenable to treatment; but how frequently are we only called in when the second truly dangerous stage has established itself! I am far from denying that, even then, ankylosis may not take place, and the patient recover with a deformed limb; but we witness many cases which progress from bad to worse, and find wasting suppuration sapping the constitution slowly, perhaps, but, nevertheless, with a certainty which assures us that death will eventually triumph; and let me ask, is not the practical Surgeon bound, under such circumstances, to step in, and propose the only human means left him to rescue a patient from the grave? Can that operation be regarded as not only useless, but hurtful, which has accomplished an object so cherished by us all, and which has proved so eminently successful in the hands of Anthony White, Fergusson, Erichsen, Hancock, and others.

These observations have already extended beyond the prescribed limits, and it would be trespassing too much were I to enter further into particulars; but I regret this the less, hearing that Mr. Hancock intends, if he has not already done so, publishing his case, which I make sure will embrace most fully every subject of moment which bears on this interesting and now recognised operation.

(a) Chelius, Miller, Fergusson, Erichsen, Druitt, Malgaigne, and others recommend it; and in the *Lancet*, vol. i. and ii., for 1848, most instructive and valuable papers are to be found by Mr. Henry Smith.

(b) In Anthony White's case, "a very small quantity of blood was lost." In Mr. Fergusson's first case, "scarcely an ounce of blood was lost." In Mr. Hancock's, "there was no bleeding to require ligature." Other authorities, if necessary, might be brought forward to establish the fact, that but little blood is lost in excision of the hip and knee joint.

(c) I saw, two or three years ago, Mr. Fergusson's first case, and the pleasure it afforded me is more than I can express. The patient walked admirably well; and I have witnessed those who have recovered from the second stage of morbus coxarius more deformed and walk much worse, without having been operated on, than this one did. Mr. White's patient lived five years after the operation, and could use the bone perfectly well; it did not even appear much shortened.

I do not, for a moment, suppose that in penning his "Strictures on Excision of the Knee and Hip Joints" Mr. Syme aimed at any such insignificant individual as myself; but, having performed the former excision several times, and the latter twice, and having published many of these cases, I feel unwilling to shrink from raising my voice in favour of operations which I know to be sound in practice, and often unquestionable in result, though denounced by Mr. Syme as "bloody, useless, and hurtful."

St. Helier's, Jersey, February 21, 1857.

ON THE FORMS OF REMITTENT FEVER PREVALENT IN THE METROPOLIS.

By THOMAS B. PEACOCK, M.D.

Assistant Physician to St. Thomas's Hospital, and Physician to the City of London Hospital for Diseases of the Chest, Victoria Park.

(Concluded from page 282.)

The following cases may be quoted as good examples of this form of disease.

Case 1.—William Bersant, aged 38, a ship-rigger, was admitted into Jacob's Ward, St. Thomas's Hospital, under the care of Dr. Peacock, on the 10th of November, 1856.

He had formerly been at sea, and served chiefly in the Mediterranean. He was in Calcutta in 1852, and then had fever and ague. For the last four years he has been at home, and has resided in Bethnal-green-road.

He states that about four weeks ago he got wet, and shortly after felt a severe pain in the right side and in the left leg, more especially at night. He has a pallid countenance, and malarious aspect, and perspires each night. The bowels are relaxed, having been acted upon four times up to the present time to-day. There is no material enlargement or tenderness in the region of the liver, but he complains of some pain in that situation, and before his admission has had leeches and a blister applied. The splenic dulness is somewhat extended beyond its natural limits. He has no cough or expectoration. He was directed to take two grains of quinine in ʒj. of the cinchona and acid mixture three times daily; to have ten grains of tannic acid every night at bed-time, and a glass of brandy in arrow-root in twenty-four hours.

On the 19th it is reported that his general appearance is much improved. His aspect is much less malarious. Pulse 96, quiet; skin cool and moist; tongue slightly dryish, and furred. He has had no decided shivering at night, but becomes sickly after he has had his tea, and yawns much; he then gets hot, and perspires profusely towards the morning. The bowels have been only twice acted upon yesterday, and once to-day. There is a slight jaundiced tinge of the conjunctivæ and surface generally. There is not now any tenderness in the regions of the liver or spleen.

To have the quinine increased to four grains for each dose.

26th.—He has continued to improve up to the present time, though the relaxation of the bowels still continues. He states that he did not sweat so much last night. He still feels yawny and uncomfortable before the sweating comes on. Pulse 92, quiet, somewhat feeble; tongue still dryish, and covered with a white fur; conjunctivæ and skin still somewhat tinged; bowels acted upon twice in twenty-four hours. He has been able to leave his bed for portions of each day. He is troubled with sickness in the evenings. To take five grains of quinine three times daily. To have with the tannic acid with half a grain of opium every night. To take the effervescent mixture with 3 m of hydrocyanic acid, and a drachm of compound tincture of camphor, four times daily. Wine two glasses.

December 3.—He has not had any return of the feelings of discomfort, or of the yawning or sweating, since the evening of the first. The countenance is much less malarious-looking, and the skin and conjunctivæ have lost their bilious tinge. He states, however, that he has taken cold, and has a cough, and expectorates massive, dark-coloured sputum. He still complains of the sickness and vomiting in the evenings. Pulse 88, quiet; tongue cleaner, but still somewhat dry. He complains of pain in the right hypochondrium, but there is no tenderness on pressure there. There is somewhat less clear resonance on percussion at the upper part of the right side of the chest, than at the corresponding situation on the left. The

inspiration sound is there harsh, and is succeeded by a harsh and prolonged expiratory sound, but there is no marked cough or vocal resonance. The bowels have been acted upon four times yesterday, and twice to-day. On the 6th, though he was otherwise improved, he complained that he had again had some sweating at night, and the relaxation of the bowels continued.

The tannic acid and opium pills were directed to be taken three times daily. The wine was increased to three glasses. From this time he stated that he continued to have some sickness and sweating at night, and the bowels continued relaxed; but there was some reason to doubt the correctness of his report, as he gained strength and improved in appearance. He was discharged relieved on the 13th. Throughout his illness there was never any eruption on the skin.

Case 2.—William Day, aged 37, a sailor, a mulatto from Barbadoes, admitted February 22, 1848. He stated when admitted that he had just returned from Odessa, and had been taken with severe rigors, followed by pain in the head and loins, the day before. He then laboured under the usual symptoms of fever, with a white tongue, etc.; the bowels were confined.

He was directed to have ten grains of Dover's powder, and ten of nitrate of potash, at bedtime, and the saline diaphoretic medicine, every three hours. The milk diet.

On the 23rd, there being much head-ache, a blister was applied to the nape.

The following notes were taken on the 24th:—

Pulse 104; tongue large and white; complains of pain in the head, which comes on at night, and he is constantly moaning. The abdomen is inflated, and the bowels have been twice relieved. He complains also of pains in the back and loins, extending across the abdomen, and in the limbs, and he has great inability to move. There is some dry, sonorous rhonchus heard in the chest, and he has a severe cough.

To continue the diaphoretic powder, and add four minims of tincture of colchicum to each dose of the mixture. On the following day the saline mixture was discontinued, and replaced by one containing grs. v. amm. s. carb. in ʒj. of inf. of serpentary, and five minims of tinct. of colch. every three hours.

28th.—He complains of pains in the bowels, and they have acted three times, and the abdomen is tumid and tender. The pain in the head continues, and he has attacks of chilliness and trembling at intervals, but does not sweat afterwards. Pulse 100, and sharp; tongue large, covered with a whitish fur, and moist; conjunctivæ deeply tinged, and surface generally jaundiced.

To omit the colchicum, and add to the mixture ʒj. of compound tincture of bark. To take 4 grains of hydrarg. c. eretâ, and 4 of compound ipecacuanha powder, night and morning. To have ʒiii. of wine.

On the 2nd of March the jaundice was entirely gone. The pulse 72, and sharp; tongue white, but clean; the abdomen less inflated; the skin moist, but he had no sweating. He was directed to have the meat diet, with a pint of porter.

On the 8th he had an attack of shivering, followed by heat and sweating, but not very profuse, and on the 9th he was very feverish. His pulse was 108, and the tongue had again become furred. On the 10th there was much pain and swelling, and tenderness around the anus; and eight leeches were applied there, and followed by poultices; and two grains of calomel and one of opium was given for two nights. On the 12th, a large abscess having formed, it was opened, and very fetid pus was discharged. On the 13th the abscess still discharged profusely. The meat diet was again ordered.

On the 14th he had another severe attack of rigors, heat, and swelling, which commenced at nine p.m. Two grains of quinine, with ʒss. of tincture of bark, and 10 minims of dilute sulphuric acid, were given three times daily.

On the 23rd he was again convalescent, but still suffered from rheumatic pains.

He was discharged cured on the 3rd of April.

Case 3.—W. Day, a labourer working at the Crystal Palace, Sydenham, was admitted May 9, 1853. He stated that he had been a healthy man, and had never had any serious illness, except slight rheumatic or feverish attacks, till a month before. He then had aguish symptoms, which commenced with a violent cold, pains in his bones, and great languor, so that he was unable to walk. He also had a bad cough, but very little expectoration. He had been much in the same

state for the last three weeks. The aguish attacks at first came on at eleven o'clock in the morning, but they had not continued regular, either as to the hour or day of their appearance. Sometimes he was four or five days without a paroxysm, at others he would have attacks daily for three or four days. He now complains chiefly of cough, with difficulty of breathing and great debility. Last night he had a severe rigor, followed by profuse sweating; and again this morning he has had a similar but less severe attack. His expression of countenance is depressed, and his face flushed, but pallid and anæmic looking. The tongue is dryish, with a thick brown fur on each side. The pulse 76, bowels confined, some sickness and pain and tenderness in the epigastrium. There is no eruption on the skin; he has never spat blood, and there are no signs of pulmonary disease. To have 2 grains of calomel, and $\frac{1}{2}$ a grain of opium, and 10 of rhubarb at bed-time. To apply a mustard poultice over the epigastrium. Soda-water for a beverage.

10th.—He has had rigors this morning, but the attack was not so severe as that which occurred yesterday. He has been very sick, but the mustard poultice has in some degree relieved him. The bowels have been twice acted upon. Pulse 78, and soft. He passed a very restless night, and the cough also disturbs him a good deal. To have 3 grains of quinine in $\frac{3}{4}$ ss. of the cinchona and acid mixture three times daily, pills of hyoscyamus and Dover's powder at night.

11th.—He had a paroxysm this morning about 10 o'clock. The rigors were rather severe, but the hot and sweating stages were very short. The sickness continues. He states that he dozes at short intervals, but gets no comfortable sleep.

12th.—He had a slight attack yesterday afternoon, but up to the present time (5 p.m.) there have been no symptoms of a return. He continues very sick, being incapable of retaining anything on his stomach. The pulse is very weak and feeble. To take 5 grains of calomel directly, and 5 minims of the dilute hydrocyanic acid in the effervescent mixture every four hours.

13th.—Expression of countenance oppressed; there is a slight icteroid tinging of the conjunctivæ, and of the surface generally. Tongue morbidly red and glazed, with a whitish fur; pulse 72 and feeble. He continues to vomit almost everything which he takes. There is great tenderness, both in the right and left hypochondria. Bowels moved two or three times daily. 4 ounces of brandy daily.

14th.—He appears much worse this morning. Expression of countenance more depressed and jaundice tinge deeper. Tongue red, glazed, coated with a whitish fur. Pulse 70, extremely feeble. He continues to vomit everything which he takes, not even the medicine nor brandy being retained. He also brings up a brown, grumous fluid, mixed with greenish yellow matter. There is much tenderness in the abdomen, especially in the left hypochondrium. The bowels are acted upon three or four times in twenty-four hours, and the stools are relaxed, dark, and offensive. He passes very little water, and it is high coloured.

15th.—He is evidently sinking. He has passed a very restless night; the pulse is extremely feeble; the bowels have not been acted upon; the skin is moist; the eye watery, and much jaundiced. He had made no water, and a catheter was in consequence introduced, but only $\frac{3}{4}$ ij. of urine were removed. It had a specific gravity of 1016, and was very albuminous, and slightly acid.

He became comatose, and died in the evening of the 15th, about a quarter of an hour after having a severe fit.

Throughout his illness, the skin was carefully examined, and no eruption was at any time found.

Post-mortem examination.—Body moderately emaciated, with a general icteroid tinging. On removing the dura mater a considerable subarachnoid effusion was found, the membrane being elevated to the level of the convolutions. The ventricles also contained a large amount of slightly opaque fluid. The substance of the brain was naturally firm and healthy, but with some excess of red puncta.

The right lung was adherent to the parietes at the anterior part of the upper lobe by old cellular attachments. The lung was large, heavy, sparingly crepitant over the whole of the posterior part, and was there somewhat congested, and contained much serum. The bronchial tubes, especially those of

larger size, were much loaded with a thin spumous fluid. The bronchial mucous membrane was slightly injected. The smaller tubes did not contain any undue amount of mucus.

The left lung was adherent to the parietes by old cellular adhesions over its whole surface. The larger tubes contained a thin spumous fluid, and the mucous membrane was somewhat injected. The lung was less crepitant than the other, and like it exuded much serum, and was congested in its posterior part.

The heart was flaccid and pale, and weighed eleven ounces. There were several opaque white spots in the course of the septum, upon the attached pericardium at its anterior surface. The right auricle and ventricle were healthy. The lining membrane of the left auricle was thickened and opaque. A loose mass of fibrin was hanging from the edge of the large fold of the mitral valve, and in the opposite surface of the smaller fold there were two masses of adherent lymph, partly of a deep red colour, and partly decolorized. The valve itself was thickened and opaque. The coronary arteries were healthy, but there was some irregularity and atheromatous deposit at their orifices.

The spleen weighed one pound and three quarters, and measured about eight inches in length by about five in width. It was much softened, so that, when handled, it broke down into a semi-diffuent pulp. The liver was somewhat enlarged and of a dark-brown colour. The gall-bladder contained a large quantity of dark green viscid bile. The ducts were pervious. The kidneys were large, mottled on the surface and extremely lacerable.

The mucous membrane of the stomach displayed considerable punctiform redness towards its greater curvature, but it there retained its natural firmness, admitting of being drawn off in strips of the usual length. Toward the pylorus it was in many places thin and decidedly softened, so that when scraped it formed a diffuent pulp. The mucous membrane of the duodenum was deeply tinged with bile, but retained its natural consistence. The mucous membrane of the remainder of the small intestine was healthy till within about four inches of the cæcum, when it became much congested, and appeared studded with minute deposits of lymph. Still lower down the congestion was very intense and the surface was of a deep brown colour. It had the appearance of being covered by a layer of false membrane, but when the attempt was made to remove portions of what appeared to be the deposit, the whole mucous membrane came away. These changes were much the most marked immediately above the cæcum. In the cæcum itself some of the valvulæ conniventes were also intensely inflamed and gangrenous, and the mucous membrane generally was similarly, but less intensely, affected to that of the ileum. The membrane in the remainder of the colon was of a deep leaden hue, and the solitary glands were throughout very distinct. The mesenteric glands were not enlarged or otherwise diseased.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

HOSPITAL NOTES.

SPONTANEOUS DISLOCATION OF THE LENS IN CATARACT.

A man, aged 62, applied on Tuesday last at the Moorfields Ophthalmic, presenting the following condition:—In his left eye was a cataract, of moderate degree of yellow opacity, through which he possessed a certain amount of cloudy vision. The pupil of the right eye was peculiarly clear, and the iris remarkably tremulous. He stated that when standing and looking straight forwards he could see fairly, but that on looking either upwards or downwards a cloud came before his sight, and he could not discern objects. Thus he would see a pin on the floor, but on stooping to pick it up would lose sight of it, and perceive only a dense cloud. Mr. Critchett's attention having been asked to the case by his clinical assistant, under whom it had first come, Mr. Critchett at once diagnosed a spontaneous dislocation of the lens. On making

the man hold his head down this opinion was confirmed, the lens immediately rising into the pupil. It appeared that the lens, which was remarkably large and perfect, hung by very slender attachments, and moving easily during all motions of the head, was, in many positions, brought into the axis of vision. The vitreous humour was, probably, more or less fluid, thus allowing of a wider area of movement. The case was interesting as showing one of the inconveniences of the operation for cataract by depression, which had been closely imitated. With regard to the immediate cause of the dislocation nothing could be made out. The man stated that one day, about four years ago, whilst reading, the page had suddenly become lighted up, and he lost perception of letters, ever since which he had suffered as above described.

OBJECTIONS TO AMPUTATION AT THE ANKLE-JOINT.

Apropos of an amputation he was just about to perform, Mr. Haynes Walton made the other day at St. Mary's some interesting observations respecting the operation at the ankle-joint. The case was that of a Crimean soldier, who had lost all his toes by frostbite. A large scar covered the front of the metatarsus, and was in a very irritable condition, and the foot over the instep was, moreover, although not swollen, exceedingly tender. After a long trial of treatment, amputation had at length appeared the only resource, and the question was as to where it should be performed. The sound part of the sole was not sufficiently long to allow of a Chopart being done, and as to amputations at the ankle-joint, Mr. Walton stated that he could not conscientiously recommend it to his patient. He knew that stumps after such operations were often exceedingly good-looking ones, but, after some careful inquiry, he had never met with a single one which was really useful. In all he had seen, the under part of the stump had remained too tender to allow of pressure upon it, and more than once amputation through the lower third of the leg had subsequently been performed. The great error arose from surgeons not seeing their cases for sufficiently long periods after they had left the Hospital, and thus fancying that because a stump looked well when healed, it would necessarily be a useful one. Only the other day he had an opportunity of seeing with Mr. Fergusson three patients, on whom some time ago the latter Surgeon had performed amputation at the ankle-joint; and although the stumps were models to look at, yet not in one case could the patient walk with comfort. From what he had seen he believed that the operation would eventually be abandoned. In the case which elicited these remarks, Mr. Walton amputated through the upper part of the lower third of the leg. On the examination of the foot, commencing carries of the anterior part of the astragalus was found, accounting for the tenderness on pressure which had been felt there. It is much to be desired that Surgeons of experience in regard to amputation at the ankle-joint, would record the results of their observations as to the ultimate value of the stump obtained. We know several London men who agree with the remarks above made, while there are others who differ very widely from them. A sufficient number of operations have now been performed for the question to be set at rest, could the final results be ascertained.

CIRCUMCISION OF THE EYE IN CASES OF VASCULAR CORNEA.

In two or three cases of very severe chronic vascularity and thickening of the layer of conjunctiva in front of the cornea, Mr. Bowman, at the Moorfields Hospital, has performed the operation of circumcising the eye, as recommended by some continental surgeons. The operation consists in dissecting up with a small sharp-pointed knife the conjunctiva at the margin of the cornea, reflecting it all around on to the sclerotic, and cutting wholly away a circular band of moderate width. If the patient be under chloroform, the dissection, although very delicate, is not one of difficulty. Its object is to cut off altogether the supply of blood to the corneal layer of conjunctiva, in the hopes of making the latter shrivel away, and cease to be an impediment to vision. An old practice was to scarify the vessels leading to the vascular cornea, but in this their trunks were merely cut across, and usually reunited almost immediately, only the most temporary benefit being obtained. But according to the recent proposal of taking wholly away a band of conjunctiva all

round the cornea, this rapid re-establishment of the vascular channels is prevented. Mr. Bowman has made the trials quite by way of experiment, and without, we believe, any very sanguine expectations as to results. In one case, done a few weeks ago, however, the benefit has certainly been marked.

AMPUTATION OF THE WHOLE FOOT, EXCEPTING THE GREAT TOE.

At the Middlesex Hospital, the other day, Mr. Moore was good enough to direct our attention to the case of a man who had come to show his foot, and who more than a year ago had been an in-patient on account of a crush. The injury was so severe that Mr. Moore was obliged to remove the four outer toes, with their metatarsal bones, and portions (almost the whole) of the cuboid and external cuneiform. The great toe was uninjured, and it alone was saved. The soft parts were deficient, and the wound was very slow in healing; ultimately, however, it cicatrised soundly, and a very useful member has been obtained. Every thing has now been quite sound for some time; the contour of the foot is certainly very singular, reminding one of an ostrich's front toe; the man, however, walks with the slightest possible limp, and as fast as any one else. The case is a valuable one in support of the rule in surgery, to always save any part of a hand or foot which can possibly be retained. Mr. Wordsworth, of the London Hospital, has mentioned to us a case in which he performed an almost exactly similar operation, and with a like most satisfactory result.

CASES OF BRONZED SKIN.

Dr. Edwards has at present under his care, at the City of London Hospital for Diseases of the Chest, two or three very interesting cases of change in colour of the skin. In one, in which the patient is a middle-aged woman, the tint much resembles the more ordinary form of bronzing, and the diagnosis of diseased supra-renal capsules has been confidently given. In a second, however, of which the subject is a tall well-built man, of about 50, the hue is almost exactly that of nitrate of silver stain in a mild degree, being a lead or slate grey, rather than brown. It is diffused on the skin of the face, chest, and trunk, but does not occur on the hands. The conjunctivæ are free from it, but within the cheeks are large patches, almost black, and exactly like the dark colouration which in a terrier's mouth is considered a sign of breed. These patches have diffused borders. The man has worked as a compositor, and has never taken nitrate of silver, as far as can be ascertained. His change in colour has been two years slowly advancing, and with it he has lost both flesh and strength. He has suffered much from a dull aching pain in the back. His chief complaint is of debility and breathlessness, the latter seeming to depend upon emphysema and commencing phthisis. The patches in the buccal mucous membrane strongly suggest the diagnosis of diseased capsules, and as such we believe Dr. Edwards inclines to regard the case, but otherwise the tint of the skin is very different from that which has hitherto been noted as connected with disease of those organs.

WUTZER'S OPERATION FOR THE RADICAL CURE OF HERNIA.

This operation appears likely to have a fair trial given it in our London Hospitals. Mr. Coote's second case, which we noticed a fortnight ago, has done very satisfactorily. Mr. Erichsen has a case in University College Hospital, in which it has been tried, and which promises a good result. The patient is a young man, and the amount of annoyance and pain caused by the instrument was very trivial. In the Metropolitan Free Hospital, Mr. Hutchinson has operated on two patients during the past week, and both are thus far doing well.

EXPECTED OPERATIONS.

On Saturday (this day), at St. Bartholomew's, Mr. Stanley will amputate at the hip-joint. At King's College, on the same day, Mr. Fergusson has an operation for prolapsus uteri, and one for fibrous stricture of the rectum. Mr. Bowman also has one for removal of necrosis of one rib. At the London, next Thursday, Mr. Curling will probably amputate a leg, on account of diseased tarsus.

THE PROVINCIAL
PRACTICE OF MEDICINE AND SURGERY.

STATISTICAL REPORT OF THE PRINCIPAL
OPERATIONS PERFORMED DURING THE
LAST SIX MONTHS OF 1856.

(Continued from page 289.)

THE subjoined Report comprises the following Hospitals:—Addenbrooke's (Cambridge), the Birmingham (Queen's), the Berks Royal (Reading), the Cheltenham General, the Cumberland (Carlisle), the Derby General, the Dorset County (Dorchester), the Dundee Royal Infirmary, the Durham County, the Gloucester, the Hitchin General, the Hull, the Leeds, the Leicester General, the Liverpool Royal, the Liverpool Southern and Toxteth, the Margate Sea-bathing Infirmary, the Nottingham General, the Sheffield General, the North Staffordshire (Etruria), the South Staffordshire (Wolverhampton), the Staffordshire General (Stafford), the Sussex County (Brighton), the West Norfolk and Lynn (Lynn), and the York County Hospital.

COMPRESSION TREATMENT OF ANEURISM.

Case 1.—The Derby: Mr. Gisborne.—A collier, aged 32, was admitted on account of a large aneurism in the right popliteal space, of two months' duration. The circumference of the knee on the diseased side measured eighteen inches, that on the other side being only fourteen. He could assign no cause for it. Compression treatment was commenced, and was kept up for five weeks. Morphia was given pretty freely on account of attacks of pain. Cold was applied to the tumour, and subsequently it was supported by strapping and bandage. At the end of the 4th week pulsation had almost ceased, and the cure was complete at the end of the 5th. He left the hospital at the end of the 8th week quite well, but the circumference of the knee was still half an inch greater than its fellow.

Case 2.—The Derby: Mr. Gisborne.—A strong, muscular woodman, aged 36, was admitted with a large femoral aneurism about the middle of the thigh. He could assign no cause for it, and it had only been noticed for six weeks. Compression treatment was tried for about a fortnight, and was abandoned on account of the aneurism having become diffused. (See Ligature of Arteries, *Case 2.*)

Case 3.—The Queen's Hospital, Birmingham: Mr. Parker.—A girl, aged 19, was admitted with a false aneurism in the palm, the result of a wound in the palmar arch. Compression of the brachial artery was commenced, and kept up almost continually for a month. The aneurism solidified, and subsequently absorbed. The cure was complete in every respect, excepting that the fingers remain a little flexed.

Case 4.—The Sheffield: Mr. Jackson.—A man, aged 40, in good health, was admitted with an aneurism of moderate size in the popliteal space. He had first noticed it about a month ago. Compression treatment was commenced on July 25, 1856. It was kept up during the day, and omitted in the night. The pulsation finally ceased during the night of January 2, after five months' treatment. The tumour had diminished, and at the time of report the patient could walk about, and was on the point of leaving the Hospital. When admitted there was a soft bruit heard over the aortic valves, and prolonged into the subclavians and carotids, but whilst under care this ceased entirely.

LIGATURE OF ARTERIES.

Case 1.—The Liverpool Royal: Mr. Bickersteth.—A stout muscular man, aged 36, was admitted on Oct. 22nd, on account of an aneurism in the left popliteal space. He stated that about a fortnight previously, in pulling off his boots, which were tight, he felt something give way, and ever afterwards had pain in the part. A week later he noticed that his ankle was swollen. The tumour on admission was about the size of a hen's egg, and pulsated forcibly. The man had formerly suffered from rheumatic fever. His countenance was dusky, and there was a double endocardial murmur to be heard over the heart. He was kept quiet in bed, with a flannel roller on the leg, and the pain in the tumour subsided, and the œdema of the leg disappeared. On the 4th of November ligature of the femoral was performed, the usual precautions were adopted, and all did well. The ligature fell on

the 16th day. The tumour became solid and gradually absorbed. The man left the Hospital quite well on December 11th.

Case 2.—The Derby: Mr. Gisborne.—A strong muscular man, aged 36, was admitted with an aneurism of the right femoral artery, about the middle of its course. Compression treatment was tried, but had to be abandoned at the end of a fortnight, on account of the aneurism having become diffused. (See above, *Case 2.*) A ligature was placed upon the common femoral, just below Poupart's ligament. Secondary hæmorrhage occurred on the 17th day, and the external iliac was tied the next day. The bleeding continued as profuse as ever, and a second ligature was now placed on the external iliac, below the origin of the epigastric. On account of yet continued hæmorrhage, on the 7th day from the last operation the trunk of the profunda was ligatured. During this operation the sac of the aneurism was opened, and a pint and a half of offensive grumous blood, mixed with pus, was removed. The man sank from exhaustion on the 8th day after the last operation, and the 35th from the first. At the autopsy all the viscera were found healthy. There was a ruptured arterial dilatation in the centre of the large diffused aneurism. The femoral vein was laid bare for about a third of its course. There was a tunneled clot in the arterial sac.

Case 3.—The Sheffield: Mr. Jackson.—A lad, aged 19. About a twelvemonth before, a tooth had been extracted, on account of necrosis of the alveolar process. The disease of the bone had since extended, and had involved the floor of the orbit. Repeated profuse arterial hæmorrhages had occurred, to arrest which plugging and other measures had proved of no avail. Ligature of the common carotid was performed on April 27th, and was quite successful. The ligature came away about the usual time, and the wound quite healed. The disease of the bone extended, and he sank into a very feeble condition. He was emaciated to an extreme degree. Death from exhaustion occurred on August 21st, four months after the operation. He had complained frequently of pain in the head, but beyond this there had been no particular cerebral symptoms.

TREPHINING OF THE SKULL.

Case 1.—The Derby: Mr. Gisborne.—A collier boy, aged 14, was admitted with a compound fracture of the left parietal bone, near the vertex, from having fallen down into a pit. The dura mater was torn, and there was protrusion of brain substance. The depressed portion was 3 inches by 2, and irregular in shape. The trephine and the elevator were used, and the depressed bone removed. Paralysis of the right side continued, and for a week he was quite unconscious. Hernia cerebri followed, and there was copious discharge, which contained brain matter. On the 22nd day he had so far recovered as to be able to move his right arm and leg. In the 8th week there was a relapse of paralysis. Death occurred in the 13th week. At the autopsy the fracture was found to have extended in a semi-circular direction across the wing of the sphenoid, at which part the bone had united. An abscess, containing half a pint of glairy offensive pus was found in the left hemisphere, and was separated from the lateral ventricle only by a thin membrane.

Case 2.—The York: Mr. Husband.—A man, aged 25, was admitted on February 29 with a compound fracture of the skull. A piece of the left parietal, about the size of a crown, had been driven down; but the lines of fracture did not extend widely. Symptoms of compression being present, Hey's saw was used, and the depressed portion elevated and removed. The symptoms were relieved by the operation, and he did fairly for a week, after which he passed into a state in which he was at times only partially conscious; and the right side was paralysed. The dura mater had been lacerated in the injury, and hernia cerebri had now resulted. The fungus growth was kept down by the application of caustics. With some variations of symptoms the man lived on to April 29 (two months). At the autopsy an abscess was found by the side of the brain, beneath the injured part.

Case 3.—The York: Mr. Hey.—A man, aged 59, was admitted, having been struck over the forehead by a piece of timber. One eye had been completely crushed, and there was a severe compound and comminuted fracture of the frontal, nasal, and æthmoid bones. The dura mater had been torn, and some small portions of brain-matter lay in the wound. He was quite conscious. Some small fragments of torn bone were taken away, and the finger was passed readily into the

brain. He did well, and the whole of the wound healed, excepting a hole which opened into the upper part of the nostril, and for the closure of which a plastic operation was subsequently performed.

Case 4.—The Hull: Mr. Craven.—A man, aged 25, was admitted with a compound fracture of the posterior part of the left parietal bone. The depressed portion was two inches long and from an inch to an inch and half wide. A long narrow slip having been removed by Hey's saw, the depressed portion was elevated. He recovered without a bad symptom, and left the Hospital a month afterwards.

Case 5.—The Hull: Mr. Craven.—A man, aged 39, admitted with a compound fracture with depression of the right parietal bone. The longitudinal sinus had been injured. Hey's saw was employed, and several portions of bone removed, and the depressed part raised. The man never rallied, and death took place eighteen hours afterwards.

OPERATIONS FOR UN-UNITED FRACTURE.

Case 1.—The Sheffield: Mr. Jackson.—A mason's labourer, aged 29, was admitted in June 1855, on account of an un-united fracture of the leg, of ten months' duration. In September perforation of the ends of the bone was tried, but without success. On December 22nd the part was cut down upon, and both ends of the tibia trephined. The trephine was made to cut about half way through the shaft of the bone. The medium of false union was removed with the portions of bone. The case progressed well afterwards, and he was discharged in April, union having taken place. Some months later he again attended to show his leg, which was quite firm. He could not use it quite so well as the other, but there was every reason to believe that he would soon do so.

EXCISIONS OF THE BREAST, OR OF TUMOURS CONNECTED WITH IT.

Number of cases, 24; recovered, 24.

Case 1.—The Derby: Mr. Fearn.—A woman, aged 36, single. Excision of the breast, on account of scirrhus, and of some enlarged axillary glands. Recovery. *Case 2.*—The Gloucester: Mr. Wilton.—A single woman, aged 43, in fair health. Excision of the entire breast, on account of scirrhus. The disease was of four months' duration. The axillary glands were not enlarged. Recovered. *Case 3.*—The Gloucester: Mr. Wilton.—A married woman, aged 36, in fair health. Excision of the breast, on account of scirrhus. Recovery. Two small hard glands could be felt in the axilla, but were not excised. *Case 4.*—The North Staffordshire: Mr. Garner.—A woman, aged 23, the subject of a chronic mammary glandular tumour of the breast. Excision. Recovery. *Case 5.*—The Brighton: Mr. Turner.—A woman, aged 45. Excision of the breast, on account of scirrhus of a year's duration. Recovery. *Case 6.*—The Birmingham (Queen's): Mr. Sands Cox.—A woman, aged 44. Excision of the right breast, on account of scirrhus, of three years' duration. Recovery. *Case 7.*—The Birmingham: Mr. Sands Cox.—A woman, aged 50, the subject of a large and deeply ulcerated scirrhus tumour of the breast. It was of two years' duration, and five years ago a malignant growth had been excised from the neck. The breast was removed, together with part of the pectoral muscle, to which it was attached. Recovery. *Case 8.*—The South Staffordshire: Mr. Sandford.—An Irishwoman, of middle age, and in fair health. Excision of the breast, and of a small gland from the axilla, on account of scirrhus. Recovery. The disease was of four years' duration. *Case 9.*—The Bradford: Mr. Terry.—A woman, aged 76, strong and healthy. Excision of the right breast, on account of a tumour of four years' duration. It proved, after removal, to be sero-cystic. Recovery. *Case 10.*—The Reading: Mr. Bulley.—A married woman, aged 37, in fair health. Excision of the breast, on account of scirrhus of six months' growth. Recovery. *Case 11.*—The Sheffield: Mr. Jackson.—A woman, aged 40. Excision of a large ulcerated mass growing from and involving the left breast. It weighed nearly four pounds. The microscope did not discover any malignant structure. The tumour was of twelve months' growth. Recovered. *Case 12.*—The Sheffield: Mr. Barber.—A woman, aged 52. Excision of the breast, on account of a small scirrhus tumour. Recovery. *Case 13.*—The Nottingham: Mr. Thomas Wright.—A woman, aged 45. Excision of the breast, on account of a scirrhus tumour, which had existed two years, and had recently been rapidly enlarging. Recovery. *Case 14.*—The Leeds: Mr. Hey.—A healthy girl, aged 22. Removal of a small adenocoele

from the breast. Recovery. *Case 15.*—The North Staffordshire: Mr. Garner.—A woman, aged 47, in poor health. Excision of the breast, on account of scirrhus. Recovery. *Case 16.*—The Queen's, Birmingham: Mr. Cox.—A healthy woman, aged 53. Excision of the breast on account of a large scirrhus tumour. Rather profuse hæmorrhage attended the operation, but was at length arrested by pressure. Recovery. *Case 17.*—The Queen's, Birmingham: Mr. Cox.—A woman, aged 48. Excision of the breast on account of a large scirrhus tumour. Recovered. *Case 18.*—The Queen's, Birmingham: Mr. Cox.—A healthy married woman, aged 56. Excision of the whole left breast on account of scirrhus. Recovered. *Case 19.*—The Bradford: Mr. Terry.—A healthy woman, aged 27, admitted with an indurated mass in one breast, of seven months' duration, and resembling scirrhus. The nipple was retracted. The tumour was excised, but showed only an hypertrophied condition of the natural gland-tissue. There was a small abscess under the nipple. Recovered. *Case 20.*—The Bradford: Mr. Meade.—A woman, aged 37. Excision of the breast on account of scirrhus of a year's duration. Recovery. *Case 21.*—The Brighton: Mr. Blaker.—A woman, aged 56, the subject of a large recurrent fibroid tumour connected with the mammary gland. It was of three months' growth. Excision. Recovery. *Case 22.*—The West Norfolk: Mr. Sayle.—A woman, 36, single, and in good health. Excision of an isolated scirrhus mass from one breast. It had existed for eighteen months, and been painful for six. Recovered. *Case 23.*—Addenbrooke's, Cambridge: Mr. Humphrey.—A healthy woman, aged 44, for ten years the subject of a scirrhus tumour of the breast. The tumour involved the whole breast, and had ulcerated, and the axillary glands were enlarged. The entire breast was removed, and the glands also. Recovered. *Case 24.*—The Sheffield: Mr. Jackson.—A woman, aged 47. Excision of the breast on account of scirrhus. Recovered.

EXCISION OF MALIGNANT GROWTHS.

Number of cases, 17; recovered, 15; died, 2.

Case 1.—The Bradford: Mr. Meade.—A man, aged 50, in good health, the subject of a large tumour in the left side of the neck. The incision required extended from behind the ear to the middle of the clavicle. The mass was removed entire, and weighed nearly a pound. It proved to be encephaloid cancer. The wound healed quickly. *Case 2.*—The Gloucester: Mr. Wilton.—A woman, aged 75. Excision of a small epithelial cancer of the lip. Recovery. *Case 3.*—The Bradford: Mr. Meade.—A woman, aged 42, in fair health. A tumour of nine months' growth, and of large size, covered the left side of the face, and extended backwards to the angle of the jaw. A free excision was performed, and the tumour was found to have deep attachments in the parotid and submaxillary regions. The disease proved to be encephaloid. The wound healed, but at the date of report there were indications of return in the cicatrix. *Case 4.*—The North Staffordshire: Mr. Garner.—A man, aged 56, the subject of epithelial cancer of the lower lip. Excision. Recovery. *Case 5.*—The Durham: Mr. Stoker.—A man, aged 43, in moderate health. Excision of an epithelial cancer of the lip. Recovery. *Case 6.*—The Brighton: Mr. Blaker.—A man, aged 59. Excision of a large epithelial cancer of the lower lip, of three years' duration. Death from erysipelas on the seventh day. *Case 7.*—The West Norfolk: Mr. Kendall.—A man, aged 60, a small farmer, was admitted, on account of a large ulcerated epithelial cancer of the scrotum, resembling soot cancer. It occupied almost the whole scrotum, and had existed for four years, having rapidly increased of late. He was much reduced by the pain and discharge. The inguinal glands were slightly enlarged. The whole of the scrotum and both testes were excised. The testes themselves were healthy. He improved greatly in health, and the wound healed well. *Case 8.*—The Reading: Mr. Bulley.—A hale old man, aged 82. Excision of an epithelial cancer of the lower lip. Recovery. *Case 9.*—The Liverpool Royal: Mr. Long.—A healthy-looking man, aged 50, a chimney-sweep. Excision of a large part of the scrotum, on account of soot cancer. The disease had existed fifteen months. Recovery. *Case 10.*—The Liverpool Royal: Mr. Long.—A chimney-sweep, aged 50. Excision of a soot cancer of small size, and of two years' duration. Recovery. *Case 11.*—The Birmingham: Mr. Cox.—A man, aged 80. Excision of an epithelial cancer of the lip. Recovery. *Case 12.*—The Reading: Mr. Moxhay.—A healthy old man, aged 72. Exci-

sion of a large epithelial cancer of the lower lip. Recovery. *Case 13.*—The Nottingham: Mr. Thomas Wright.—A labourer, aged 48. Excision of an epithelial cancer of the lip, which had existed for a year. Recovery. *Case 14.*—The Leeds: Mr. Smith.—A man, aged 61. Excision of a horny epithelial growth from the lower lip. Recovery. *Case 15.*—The Leeds: Mr. Teale.—A woman, aged 42. Excision of an ulcerated epithelial cancer of the hand. The first and second fingers were removed. Recovery. *Case 16.*—The Brighton: Mr. Blaker.—A feeble old man, aged 83, the subject of a rapidly growing epithelial cancer of the cheek, of ten weeks' duration. Excision. Death from exhaustion on the tenth day. *Case 17.*—The Bradford: Mr. Meade.—A man, aged 28. Excision of a large encephaloid tumour from the left side of the neck. The wound healed, but the disease quickly returned in the cicatrix.

See also "Amputations," "Excisions of the Breast," "Excisions of the Testis," "Amputations of the Penis," and "Removals of the Eyeball."

AMPUTATION OF THE PENIS.

Number of cases, 3; recovered, 2; died, 1.

Case 1.—The Gloucester: Mr. Wilton.—A man, aged 57, for eight months the subject of cancer of the penis. Amputation of the entire organ. Recovery. Some inconvenience from contraction of the urethral orifice followed. *Case 2.*—The Reading: Mr. May.—A healthy man, aged 65, the subject of epithelial cancer of the penis. Half the length of the organ was implicated, and the disease was of eighteen months' duration. Amputation of the entire organ. The wound had nearly healed, when, three weeks after the operation, a low form of pneumonia came on, and proved fatal in six days. *Case 3.*—The North Staffordshire: Mr. Turner.—A cachectic man, aged 46. Amputation of the penis, on account of epithelial cancer of the glans. Recovered.

Number of cases, 4; recovered, 3; under treatment, 1.

OPERATIONS FOR EPULIS.

Case 1.—The Gloucester: Mr. Wilton.—A boy, aged 10, the subject of an epulis the size of a large walnut, growing from the gum of the lower jaw. Excision. Under treatment. *Case 2.*—The Gloucester: Mr. Wilton.—A man, aged 51, the subject of an epulis the size of a very small walnut, on the gum of the upper jaw. Excision. Recovery. *Case 3.*—The Leicester: Mr. Benfield.—A healthy woman, aged 47, the subject of an epulis of the upper jaw, of five months' duration. Excision. Recovery. *Case 4.*—The Bradford: Mr. Poppleton.—A healthy woman, aged 24. The epulis was of considerable size, and grew from the right side of the lower jaw. Some teeth were removed, and a portion of the alveolus. Profuse hæmorrhage followed, and was very difficult to arrest, being checked only by the application of the actual cautery. Recovered.

EXCISION OF NON-MALIGNANT GROWTHS.

Number of cases, 28; recovered, 28.

Case 1.—The Derby: Mr. Gisborne.—A married woman, aged 31. Excision of a very large pedunculated tumour of the left labium. It weighed three pounds and a quarter, and had a remarkable resemblance to a placenta. It had existed many years, but had latterly grown rapidly. Recovery. *Case 2.*—The North Staffordshire: Mr. Garner.—A woman, aged 26. Excision of a neuroma of the ulnar nerve. Recovery. *Case 3.*—The South Staffordshire: Mr. Sandford.—A man, aged 40, in robust health. A large encysted tumour was excised from the right parotid region. The wound healed well, but some facial paralysis remained. *Case 4.*—The South Staffordshire: Mr. Sandford.—A healthy woman, aged 86. Excision of fibrous tumour, of four years' growth, from near the angle of the lower jaw. Recovery. *Case 5.*—The Hull: Mr. Craven.—A woman of middle age, the subject of a large pendulous hypertrophy of the right labium. A growth of similar nature had been removed from the left labium by Mr. McMurdo in St. Thomas's Hospital some time previously. Excision. Recovery. *Case 6.*—The Reading: Mr. May.—A healthy man, aged 65, the subject of a small tumour over the ramus of the jaw. It was excised, and found in the operation to be connected by a pedicle with the parotid, and to consist of gland tissue. Recovery. *Case 7.*—The Derby: Mr. Fearn.—A man, aged 50. Excision of a recurrent fibroid tumour from the back, the size of a fœtus's head. It had been twice before removed, the last time two years ago. Recovery. *Case 8.*—The Sheffield: Mr. Jackson.—A man,

aged 49. A tumour of doubtful nature had followed a bite from a horse over the right shoulder. Excision. Recovery. *Cases 9 to 25.*—In these, adipose tumours of considerable size were removed. In all, the patients recovered easily. *Cases 26, 27, and 28.*—In these, encysted tumours were removed. Recovery in all. In one, the tumour was an enlarged Cowperian cyst in the labium, about the size of a walnut.

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Medical Times & Gazette.

SATURDAY, MARCH 23.

OUR LOSSES IN THE CRIMEA.

IN bringing Colonel Tulloch's late review of the proceedings of the Crimean Commission and the Chelsea Board under the notice of our readers, it is not our intention to enter upon the questions raised by the author as to the efficiency of the Military Staff in the Crimea, or the honesty and competence of the seven general officers composing the Board at Chelsea. These are fitting subjects for discussion in the daily journals, but would be out of place in our pages. Colonel Tulloch has, however, with a view to support the statements made by the Commissioners as to the frightful extent of the mortality among the soldiers, published some statistics showing the prevalence and fatal character of the diseases in the Army of the Crimea, during the winter of 1854-5, which are well deserving of careful study. Although, from the circumstance of these statistics having been prepared from returns obtained in the Crimea during a period of active service, they may not be so complete and accurate in all the details as could be desired, yet Colonel Tulloch's experience and reputation as a Statist afford a sufficient guarantee of their general accuracy.

The period included in Colonel Tulloch's observation comprises the seven months, from October 1, 1854, to April 30, 1855—that period during which the Army experienced unexampled privations, and suffered unprecedented losses. "Compared with these losses," says the author, "the mortality in our Army on all previous occasions sinks into comparative insignificance; even that of Walcheren, which threw the nation into mourning, and for years convulsed our senate, did not exceed a fourth part of the average here recorded. Armies have perished by the sword, they have been overwhelmed by the elements; but never, perhaps, since the hand of the Lord smote the host of the Assyrians, and they perished in a night, has such a loss from disease been recorded as on this occasion."

During the seven months reported upon, the average strength of the army amounted to 28,939 men, among whom the admissions into hospital were 53,913, being in the ratio of 1863 per 1000 of the strength; or in other words, on an average nearly every man must have been twice in hospital in that period. The deaths, including those at Scutari, but exclusive of men killed in action, were 10,784 or 372 per 1000 of the strength—a mortality so enormous that had it continued at

the same rate, and no reinforcements been sent out, the whole army would have been annihilated in about 16 months. Truly, such an amount of sickness and mortality demanded a rigid inquiry, to ascertain whether it arose from unavoidable circumstances, such as the powerful destructive agents of the enemy, or the natural and for the time irremediably unhealthy character of the climate or soil; or whether it was not attributable to *preventible* causes, which might have been foreseen, and with the exercise of a moderate amount of judgment, energy, and common sense, have been obviated. That it was not attributable to the destructive weapons of war is incontestably shown by the fact that only 1 in 13 of the admissions into hospital and 1 in 15 of the deaths resulted from wounds and injuries. The remainder were caused by disease which, there is too much reason to fear, arose from the carelessness, incapacity, and obstinacy of those on whom the supply of the soldiers with food, clothing and shelter devolved. The following summary shows the diseases by which the admissions and deaths were caused in the different arms of the service:—

	Fevers.	Diseases of Lungs.	Diseases of Stomach and Bowels.	Spasmodic Cholera.	Scoury.	Frostbite.	All other Diseases.	Total, excluding Wounds and Injuries.	Proportion per 1000 of strength.
<i>Infantry: strength, 23,775.</i>									
Admissions into Hospital..	8959	2997	18838	1879	1834	1844	5381	41982	1766
Deaths in Crimea & Scutari	1930	313	4071	1123	192	399	379	8407	354
<i>Cavalry: strength, 1,915.</i>									
Admissions into Hospital..	579	237	1567	45	141	33	766	3368	1759
Deaths in Crimea & Scutari	48	25	130	38	..	8	17	266	139
<i>Artillery and Sappers: strength, 3,249.</i>									
Admissions into Hospital..	855	204	2477	83	92	70	697	4478	1378
Deaths in Crimea & Scutari	93	27	286	67	3	21	44	541	166

The causes which gave rise to this enormous mortality "may be briefly summed up as—improper food, no means of cooking it, insufficient clothing, no adequate shelter from inclemency of the weather, want of fuel, excessive duty of a most severe and harassing description, (including the bringing up of supplies from Balaklava and digging roots for fuel,) want of medicines and medical comforts when sick, and the necessity of treating disease under circumstances which almost precluded the chance of success." (a)

The preceding table furnishes strong corroborative proof of the truth of these conclusions, for the mortality was great in proportion to the exposure of the men, and their inability to procure proper food. Thus the mortality in the Cavalry was less than two-fifths of what occurred among the Infantry. "So marked a difference," says Colonel Tulloch, "may be traced to the circumstance that this arm of the service was entirely exempt from the labours of the siege; that they had but little night-duty; and that, being in the vicinity of Balaklava, they had greater facilities for getting supplies. Among the Artillery and Sappers the mortality was rather higher than in the Cavalry, but still much below that of the Infantry. They were employed in the trenches in a smaller proportion than the men of the Line, and "the batteries, having their wagons, were regularly provided with rations and other supplies, and were thus spared the fatigues they would otherwise have undergone for that purpose." The Sappers and Miners also, besides having two nights in bed, which was often more than the men of the Line, "had an officer at Balaklava, who purchased all kinds of groceries, flour, and other food for them from the shipping, whenever they could be obtained, and had them conveyed to the front on fifteen mules belonging to the corps, which were maintained effective throughout the winter."

(a) British and Foreign Medical and Chirurgical Review for July, 1856, p. 118.

The marked exemption from mortality of these two arms of the service illustrates the influence of the causes already referred to in the destruction of life in the Crimea. Colonel Tulloch in his report furnishes additional evidence that the losses sustained by our army depended on "mortal agency," by contrasting the deaths in different portions of the infantry. Thus, in the Highland Brigade, (3rd regiment,) which was stationed at Balaklava during the whole period, and was therefore nearer its supplies, had less trench duty, and was early hutted, the deaths were in the ratio of 24 per cent. of the strength. The loss in four regiments which arrived early in January, after the period at which the greatest privations from want of food and clothing and from excessive work was past, was only 7 per cent. Four regiments which had arrived early in December, and were consequently more exposed to the wet, cold and privations, lost 27 per cent., while the *deaths in the rest* of the infantry employed in the sieges averaged 45 per cent. in the seven months. In some of the regiments the mortality was very high. The 46th, for instance, was nearly annihilated; nor is this surprising, when we learn on the authority of the commanding officer, that the men were in the trenches twelve hours in every twenty-four in November, and ten and a half in every twenty-four in December; "and it was stated by the surgeon and verified by the lieutenant-colonel, that at one time the men were in the trenches for six successive nights, and had only one night in bed in the course of a week; but that afterwards the duty was better regulated."

It is melancholy to reflect how many thousand lives have been sacrificed, and how much our national honour has suffered, from the disgraceful incompetency of the staff of that army. Notwithstanding the opinion of the Board at Chelsea, that no one was to blame, but that the losses were unavoidable, we feel sure that no impartial person can study Colonel Tulloch's book without arriving at the conclusion, that one-third of the force perished in that winter "from the slow, though sure operation of disease, produced by causes most of which appeared capable at least of mitigation." That the mortality could not have been, "in any important degree, the result of climate, must be inferred from the circumstance of this loss having occurred in a country which, by the concurrent testimony of nearly all the Medical Officers, as well as the experience of the following year, appears to have been as healthy as Great Britain, except, perhaps, as regards Cholera."

The statistics of the Army in the Crimea forcibly illustrate the importance of the study of military hygiene. The loss among the Infantry in seven months was 755 killed in action and in the trenches—608 died of wounds and injuries, and 9383 from disease. It is to the *prevention* of disease that attention should be especially directed to preserve an army efficient, and to save the lives of the soldiers. We trust that the history of the late war will prove to the military authorities the necessity for more careful attention to this branch of science on the part of the Commanders of Armies, and the policy of giving to the Medical Officers an efficient voice in the sanitary arrangements of future expeditions; and we are glad to learn that instructions have been given to the generals in command of our forces in China to pay special attention to the representations of the Medical Staff on all questions affecting the sanitary condition of the Army.

THE WEEK.

Why has no medical officer received the decoration of the Victoria Cross? Are there any of the statutes which exclude medical men from participating in the reward "FOR VALOUR?" Certainly not. The only qualification is an act of bravery, performed in presence of the enemy. It would be invidious to name any one as specially deserving of this honour, but we

may state that many medical officers have been reported to the Generals of Divisions by their Commanding Officers for their readiness in going under heavy fire to assist the wounded. In some few cases these reports have reached the Commander-in-Chief, and more than once they have been recorded in a despatch. One surgeon went out of the advanced trench before the Redan, and carried in the body of the Colonel of the 3d Buffs, under a tremendous fire. Another assisted wounded officers of the Light Cavalry Brigade at Balaklava, far in front of the advanced picquets of the French Chasseurs, and at the most imminent personal risk. A third saved the life of the Duke of Cambridge at Inkerman, in a hand to hand conflict. A fourth assisted Captain Cust, at the Alma, when severely wounded in the very thickest of the fight. And these were no isolated examples. No danger kept back the medical officers from the performance of their duty, and surely, to say the very least, there was as much valour shown in assisting a wounded man under a heavy fire, as in joining in the conflict. One reason we have heard assigned for not giving the Cross to medical officers is remarkable, and we may add that it was given us by a gentleman in a high official position. "It is not considered advisable to encourage medical officers to distinguish themselves 'for valour.' They are quite ready enough as it is to volunteer for dangerous duty, and if we were to reward them as we do others, they would all be killed, and we should have no doctors left for the troops." This may be complimentary, but it is not encouraging.

A case of attempting poisoning by prussic acid has just been tried at the Yorkshire assizes, and has resulted in a sentence of transportation for life being passed upon the accused person. The prosecutor and the prisoner were brothers, and it appeared from the evidence, that the latter would be entitled to a sum of money on the death of the former. The poison was introduced into a bottle of sherry, which was sent to the intended victim, but he fortunately took very little of the liquid, being deterred from drinking it by its peculiar flavour. Several other persons also tasted it, but in very small quantities, being influenced by the same reason; but they were all affected, though in a slight degree, with the symptoms of poisoning by prussic acid. It was proved beyond a doubt that the bottle contained prussic acid, for the fluid not only caused the death of a cat and some rabbits to which it was administered, but the characteristic appearances were observed on the application of the appropriate tests. The only deficiency in the chain of evidence was the absence of the druggist who supplied the prussic acid; but he would probably keep out of the way, from the fear of the censure which would undoubtedly have been passed upon him for supplying so dangerous a drug. A Mr. Smith, a druggist of Bridlington, deposed that the prisoner had applied to him for a quantity of prussic acid, but that he had refused to supply him.

A few weeks ago we recorded the fact that Mr. Grimbly, the Medical officer of the Banbury Union, had been compelled to resign his appointment in consequence of the mean and arbitrary conduct of the local Guardians. We also made the gratifying announcement, that after that gentleman's retirement, the whole of his Medical brethren had expressed their feelings of sympathy towards him, and what was still more important, had pledged themselves, one and all, *not to apply for or accept the vacant office*. We have, therefore, been astonished at the sight of a printed letter to the Guardians of Banbury, by Mr. Shearman Chesterman, who is said to have taken the Chair at the meeting, when the pledge just alluded to was taken. In this letter Mr. Chesterman not only denies

his concurrence with the upright and manly resolutions of his Professional brethren, but he avows his sympathy with the Guardians, and denounces the "scurrilous, offensive, and unjust attacks" made upon them by the Medical press, ourselves included. It appears that a Dr. Coparn, who is the partner of Mr. Chesterman, and who is probably a very young man, as his name does not yet appear in the London and Provincial Medical Directory, has applied for this vacant office, a fact which may probably account for Mr. Chesterman's extraordinary conduct. We should add, that the Medical practitioners of Banbury reiterate their statement, that Mr. Chesterman not only took the chair at the meeting, but evinced his cordial sympathy with the sentiments expressed. As we learn, however, that Mr. Grimbly has been reinstated in his office by a large majority (and we hope with an addition to his salary), the unpleasant proceedings which we have recorded may be said to terminate, and Mr. Chesterton will, probably, on mature reflection, regret the inconsistency of which, we fear, he has been guilty, and at the same time rejoice that the interests of justice and humanity have been served by Mr. Grimbly's restoration to office.

The French census of 1856 has brought out some remarkable facts. The population of France has not increased since 1851, yet from 1841 to 1846 the increase had been 1,200,000. In the succeeding five years the increase was 380,000, and then in the last five years no increase, so that the population has been progressively declining since 1846. The contrast with the increase shown by our own census and Registrar-General's reports is extraordinary. It is curious to see how the decrease may be accounted for by different people. Of course Mr. Lizars and Mr. Solly will point triumphantly to the increase in the consumption of tobacco of late years, and explain everything very easily on the Tobaccophobia theory. We should not be surprised to see a sliding scale of increasing and decreasing population and tobacco consumption, rising and falling in inverse ratio, worked out with beautiful mathematical accuracy. Mr. Urquhart, of course, would settle the question quite easily to his own satisfaction on the simple fact that the French do not use the Turkish bath, and have not learned the grand truth, that the minimum temperature of a warm bath should be 114°. Our polypharmaceutists may think that the advance of homœopathy in France has a good deal to do with this increased mortality; while the homœopaths, on the other hand, hint very plainly that the expectant system of our French brethren has been giving way of late years before more violent methods of treatment, and point to the results in the Census. M. Ricord has a theory of his own, and knows something of a filthy habit spreading very much of late years in France, as proved by an extraordinary increase in the sale of an article of Parisian manufacture. Dr. Farr would probably point to the very marked and constant migration of the rural population into the large towns, which has been proved, and connect this with deterioration of the public health. The war, emigration, the cholera, the high price of food, will all be cited by their advocates; and the matter is too serious to be passed over without grave consideration. Our turn may come next.

A paper was read last Tuesday at the British Meteorological Society by Mr. Poey, Director of the Observatory at the Havannah, on the "Photographic Effects of Lightning," which has attracted some attention among both artists and physiologists. It has been known for a long time that electric light, like sunlight, had the power of producing photographic impressions upon properly prepared surfaces. Mr. Poey attempts to show that there is the same power in the lightning flash; and had he stopped here we should not have been

disposed to question his assertion. But he goes much further, and asks for our belief in statements which would lead to the conclusion that the human skin is a proper surface for the reception of lightning-struck photographs; that the interposition of clothing between the skin and the object to be represented does not prevent the formation of the image; and that we are to lay aside all we know of the laws of optics, and admit that the rays of light proceeding from an object may be concentrated and brought to a focus so perfectly as to produce a photographic picture without the aid of any lens. The so-called facts brought forward by Mr. Poey are of this sort: It is said that Benjamin Franklin in 1786 several times stated to a member of the French Academy of Sciences, M. Leray, that a man who was standing opposite a tree which had been struck by lightning was very much surprised to perceive on his breast a fac-simile of the tree itself. A similar instance was recorded in the *Journal of Commerce of New York* on the 26th of August, 1853. A little girl was standing near a window before which was a young maple-tree; after a brilliant flash of lightning a complete image of the tree was found imprinted on her body. In 1855, M. Raspail mentioned another example of this kind. A boy having climbed a poplar-tree after a bird's-nest, the tree was struck by lightning, and the youth was thrown upon the ground. On his breast was marked the image of the tree, and on one of its branches the nest of the bird appeared very plainly. M. Orioli, a learned Italian, brought some years ago before the scientific congress of Naples, over which he then presided, four illustrative cases. In September, 1825, lightning fell on the foremast of a brigantine in the Bay of Arniero. A sailor who was sitting under the mast was struck dead, and had left on his back an impression of a horse-shoe, similar even in size to the original one which was fixed on the top of the foremast. In the next case, a sailor had, on the left of his breast the impression of a number, 4.4, with a dot between the two figures, similar in all respects to the same number 4.4 which was at the extremity of one of the masts;—and so on with many marvellous stories, in which the images of pieces of money, a flower, a landscape of pine-trees, crosses, and so on, have been found imprinted on the bodies of persons illuminated by a lightning flash. We do not wish to say that anything is impossible, but we do say that very different evidence to this must be advanced before we can admit the truth of statements leading to a complete revolution in our notions of some of the fundamental Laws of Physics.

REVIEWS.

On Diseases of the Skin. By Erasmus Wilson, F.R.S.
Fourth Edition. Pp. 747. London. 1857.

WHEN the first edition of this work appeared, about fourteen years ago, Mr. Erasmus Wilson had already given some years to the study of Diseases of the Skin, and he then expressed his intention of devoting his future life to the elucidation of this particular branch of Medical Science. In the present edition Mr. Wilson presents us with the results of his matured experience, gained after an extensive acquaintance with the pathology and treatment of cutaneous affections; and we have now before us not merely a reprint of his former publications, but an entirely new and re-written volume. The whole subject has been expanded by the addition of many chapters upon diseases not formerly included in a dermatological classification, but which are of very common occurrence in the routine of Medical practice, such as the external indications of scrofula, the eruption of boils and carbuncles, the cutaneous indications of syphilitic disease, and the morbid affections of the nails. Thus the whole history of the diseases affecting the skin, whether they originate in that structure or are the mere manifestations of derangement of internal organs, is brought under notice, and the book includes a mass of information which is spread over a great part of the domain of Medical and Surgical Pathology.

The subject of the classification of Skin Diseases has been submitted by Mr. Wilson to a careful revision, and he now divides all cutaneous affections into two groups, namely, those which affect the general structure and those which affect the special structure of the skin. Among the former are the diseases which arise from general causes, as Erythema, Lichen, Eczema, Impetigo, Herpes, Furunculus, and Purpura; those which arise from special external causes, as Scabies, Cutaneous Worms, Burns, and Frostbite; those which are due to special internal causes, as Leprosy, Lupus, Scrofulous Tumours and Ulcers, Keloid, and Elephantiasis; those which are connected with the syphilitic poison; and diseases arising from animal poisons of unknown origin, and giving rise to eruptive fevers, as Measles, Scarlatina, Smallpox, Varicella, and Vaccinia. Among the diseases which affect the special structure of the skin, are those which are connected respectively with its vascular structure, its nervous structure, its papillary structure, its pigmentary structure, the sudoriparous organs, the sebiparous organs, the hair-follicles and hair, and the nail-follicles and nails; and to all these diseases appropriate names are assigned.

Again, in subdividing the groups, Erythema is considered as the type of a series including Pityriasis, Erysipelas, Roseola, and Urticaria; Lichen includes Rosacea, Strophulus, and Prurigo; Eczema is associated with Psoriasis and Sudamina; Impetigo is closely related to Ecthyma; Herpes and Pemphigus, Furunculus and Anthrax, are respectively paired together; and Purpura stands by itself at the end of the list. This arrangement is not merely an arbitrary one, for it is the result of very mature reflection on the part of Mr. Wilson, who regards Erythema, Eczema, Impetigo, and Furunculus, as so many stages of disease, all consisting of vascular congestion, but accompanied by different external manifestations; while Lichen is a congestion of the pores and superficial portion of the follicles, producing pimples. To quote Mr. Wilson's own words, "As simple inflammation is capable of, and is the active agent in, producing these several morbid conditions of the skin, we are not surprised at finding that they are mutually convertible; that an erythema, for example, may become lichen by the development of pimples, an eczema by the evolution of vesicles, or an impetigo by the production of pustules. In the same manner, the pimples of lichen having subsided, the lymph or ichor of eczema being dried up, and the pus of impetigo exfoliated in crusts, there may remain behind a chronic erythema, to which another term, namely, *psoriasis*, has been applied. Therefore, in essential nature, erythema, lichen, eczema, impetigo, and psoriasis are simply modified manifestations of inflammation of the skin, corresponding with recognised stages of common inflammation; the modifications resulting from intensity, cause, and idiosyncrasy—in other words, from accidental conditions."—P. 58.

We have thus noticed at some length the classification now proposed by Mr. Wilson, and, without approving it altogether, we are induced to regard it with approbation, because it appears to be founded upon a true pathological basis, and to lead of necessity to simple and natural therapeutical indications. It is a trite observation, that the multiplication of names too often only encumbers science with a verbose and unmeaning terminology; but when words are the exponents of ideas, they are the finger-posts which lead the student by the shortest road to the discovery of Truth.

The chapter on the Therapeutics of the Skin is admirably written, and in a brief space contains the essence of all the rules of treatment laid down in the subsequent part of the volume. The means to be adopted in the management of Skin Diseases are, of course, divided into constitutional and local; and while maintaining that this class of affections comes within the province both of the Physician and the Surgeon, yet, on the ground that they are essentially *blood diseases*, Mr. Wilson would, if compelled to adopt either exclusively, prefer the constitutional method of treatment. The indications to be fulfilled in any given case of Skin Disease are, first, to *eliminate*, which is accomplished by mild purgatives; secondly, to *restore power*, which is effected by tonics, and acids or alkalis, as circumstances may require; thirdly, to *alleviate the local distress*. The diet most suitable in Skin Diseases, especially those of a chronic kind, is a nutritive animal diet; and while the range of nutritious articles of food is pretty extensive, sugar is prohibited. Malt liquors are objectionable from the sugar which they contain;

but sherry and water, or weak brandy-and-water, may be allowed. Ham, salted meats, and vinegar, which are considered unwholesome by some authorities, are not regarded with disfavour by Mr. Wilson. In the local treatment, Mr. Wilson advocates the use of ointments, judiciously selected, although a prejudice has lately existed against this mode of treatment which has been replaced by the water-dressing. He attributes the opposition which has arisen against ointments to the fact that these applications are often badly prepared, and that by their rancidity they sometimes aggravate the disease. Mr. Wilson speaks very highly of the *benzoated oxide of zinc ointment*, which he regards as the most perfect local application for all chronic Diseases of the Skin. Its efficacy depends upon the power of benzoin to prevent decomposition in ointments, and the mode of preparation is to add the gum-resin in powder to the melted lard in the proportion of 10 grains to the ounce, the ointment being afterwards filtered through paper. This application, says Mr. Wilson, "is light, produces no pressure, is thin as a film of varnish, and yet excludes the air from the inflamed part, thus preventing desiccation and oxydization; and it retains the ordinary moisture of the skin, acting as a water-dressing or natural poultice."

We have thus shown, as fully as our limits will permit, some of the chief features of novelty which are presented in this fourth edition of Mr. Wilson's Treatise; and we can safely recommend it to the Profession as the best work on the subject now in existence in the English language.

BOOK NEWS.

The Philosophy of Common Life, or the Science of Health, is the name of a book just published by Dr. Scoffern, who dedicates his pages to Sir Benjamin Hall, and treats of a multitude of matters connected with the human system, and its relations to the external world. The mechanism of the human frame, the nature of food and drink, and the adulterations of the latter; the influence of poisons, the ventilation and drainage of dwellings, the effects of climate and clothing; and even the composition of depilatories, hair-oils, and cosmetics, are all treated in this very comprehensive volume. In a work evidently designed for the public, we are happy to find a very wholesome denunciation of the homœopathic quackery, which is considered at some length, and with great ability and moderation.—Dr. Seaton has published, in the form of a pamphlet, the paper which he lately read before the Western Medical and Surgical Society, *On the Protective and Modifying Powers of Vaccination*. This very able communication, to which we have before very briefly alluded, ought to be in the hands of every person who is interested (and who is not?) in this important subject; and it is particularly deserving of the notice of those who are still sceptical as to the benefits conferred upon humanity by the great discovery of Jenner. The statistical results recorded in this paper ought to carry conviction to the mind of every one who is not actually blinded by prejudice. *The Constitution of the Animal Creation, as expressed in its Structural Appendages*, is the title of a book by Dr. Calvert Hölland. His object appears to be to demonstrate the connexion which exists between certain internal vital manifestations, and the external appendages of animals. More than half of his book is devoted to the subject of the development of hair and fat in the human species, in relation to age, sex, and constitution. Many of the reasonings employed are founded on well-established data, but others are wholly speculative, and will not readily pass current. The mode in which the different proportion of hair in different parts of the body is accounted for by the author is ingenious enough, but beyond its ingenuity his theory has very little to recommend it; nor can we find that even if it were generally admitted, any practical result would be likely to follow from its adoption. The connexion which is shown to exist between the external appendages of certain of the lower animals,—as, for instance, stags, and many birds,—and their generative impulses, is a subject of great interest, but without much novelty; and the details may be found in most works on Physiology and Natural History.—The Eighteenth Part of Dr. Copland's *Dictionary of Practical Medicine* contains the conclusion of the article on Tubercular Consumption. The chief subjects discussed in the rest of the number are, the Diseases of the Urinary Bladder; the Pathological Relations of the Urine and its Deposits; Urticaria; the Diseases of the Uterus and its

Appendages in the Non-Puerperal States, and the Displacements and Deviations of that Organ; and the History of Vaccination. In looking over the articles we discover the marks of the same indefatigable spirit of research which has characterized all the preceding numbers of Dr. Copland's Dictionary; and whether in discussing the modern views of the Chemistry of the Urine or the present debatable question of certain uterine affections, we find the author thoroughly *au fait* to the literature of the subject, and prepared to offer his own views for or against the various theories and doctrines which are advanced. In the long period which has elapsed since the appearance of the first part of this laborious work, many Medical novelties have sprung up, some to take their place among the established facts of science, and some to sink into oblivion; but Dr. Copland's mind has been continually at work, sifting the wheat from the chaff, preserving what is valuable, and discarding what is worthless. The present number is quite equal to any of its predecessors, and the Medical public will be gratified to learn that another number will complete this great task, which has occupied so many years of Dr. Copland's life, and which is certainly one of the most extensive ever undertaken by a single individual.—Among notices of many excellent papers in the *Report of the North Staffordshire Medical Society* for the year 1855-6, the following is worthy of notice:—"Six cases of poisoning by arsenic in one family were mentioned by Mr. Walker, in all of which recovery took place, and almost immediate relief to the urgent symptoms was obtained by the free administration of the sesquioxide of iron, mixed with water, and given of the consistency of treacle. Two of the patients were of tender years, and the symptoms in all the cases were severe. The poison was mixed with about an equal portion of alum, and intended to be used for another purpose. About half a teaspoonful of this mixture, mistaken for the sesquicarbonate of soda, was mixed with the flour of which some cakes were made, and these were freely partaken of at the evening meal by all the members of the family who were at home. The poison had been taken about six hours before the antidote was administered; free vomiting had been kept up most of the time, but without any relief to the symptoms."

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON CYSTITIS, FROM THE EMPLOYMENT OF BLISTERS.

By M. MOREL-LAVALLEE.

M. Morel-Lavallée states, that the present memoir is a summary of former papers he has laid before the Académie des Sciences since 1837, further experience only having confirmed the accuracy of the conclusions drawn in them. The fact of irritation of the bladder being producible by blistering the skin had long been known; but the mode of production of this phlegmasia, its symptoms and pathological anatomy, have been described by no preceding author. M. Morel considers it the simple effect of the blistering principle, introduced into the blood by absorption, and eliminated in the urine, acting upon the walls of the bladder, always inducing the production of albumen and sometimes of false membranes. This view has led to the dissipation of some errors, which arose when the attention paid to Bright's disease led to the frequent examination of the urine for albumen. When this was found in rheumatism, pleurisy, and other affections, it was attributed to disease, while it was really due to the action of the blisters employed upon the urinary organs.

In the majority of instances, blisters excite no such effects upon the bladder; but, while some individuals seem always sheltered from such accidents, others are so only temporarily; and although at one time the effect may not be produced, at another it may, and so on with variations or alternations even in the same case. The inconstancy of the result depends upon differences in individual susceptibilities, analogous to those which prevail with respect to the excitement of buccal inflammation by mercury. The dimensions of blisters usually influence the production and intensity of the cystitis, but the employment of small ones offers no absolute guarantee against

its occurrence, a blister no larger than a florin having sufficed for its production in several instances.

As a result of the inflammatory action we may have false membranes, these varying in size from a sixpence to half a playing card, and also varying considerably in thickness and tenacity. Either in combination with these or not, a whitish opaline, tenacious, gelatiniform deposit may form at the bottom of the vessel as the urine cools. It is analogous in character to the fibrinous deposits which are formed from the fluids of ascites or pleurisy. This is only found in the severer forms; but in *all forms* albumen is held in suspension, in varying quantities, in the urine, and may be at once detected by heat or nitric acid. These various products all have their origin in the same circumstance—inflammation of the lining membrane of the bladder—which, according to the degrees of its intensity, is manifested by rubefaction, vesication, and ecchymosis, the production of false membranes, or ulceration.

The symptoms usually are observed three or four hours after the application of the blister, but sometimes later; and in diseases such as the cholera, in which absorption is suspended, a few days may even elapse. They may amount to the severest suffering, with constant, painful, and spare micturition, when false membranes are present, and sometimes the fibrinous deposit also, accompanied by fever, and a feeling of excessive anxiety. In other cases the suffering is less, and these deposits are not apparent, the urine being always, however, found albuminous. The pain may be inconsiderable in the hypogastrium, it being chiefly referred to the glans penis, and sometimes existing in considerable force at the anus. When attention has been once directed to this affection it is hardly possibly to mistake it for albuminuria resulting from disease. The great vesical tenesmus and pain in the glans have often given rise to suspicion of stone; and M. Guersant has frequently had children sent to him under the idea that this existed. When the affection is produced not at once from the application of a blister, but from the dressing this with *ung. lytta*, the case may be more obscure; for the symptoms are then often found to occur only at considerable intervals. Sometimes, too, difficulty in diagnosis may occur from the pain being referred to the anus.

Although usually but a slight affection, in a nervous or enfeebled subject, if the blister has been large, it may become of great importance. The false membrane too may form the nucleus of calculous disease, or may, and especially in the case of stricture, obstruct the flow of urine. In fact, in subjects suffering from stricture, the use of blisters should be as much as possible avoided. The prevention of the affection by abstaining from the use of blisters is not very easy, as we have no efficient substitute for these; while the mode of preparing them, or the sprinkling camphor and the like over them, exerts no effect in warding it off. The blister should be removed as soon as vesication is produced, and soft plaister which liquefies as it acts and is difficult of removal should be avoided. As soon as any symptoms show themselves, the blister and the raised cuticle should be removed, and abundant diuretic drinks administered. These, however, often fail to induce abundance and dilution of the urine, either from the presence of fever or the participation of the kidneys in the inflammation. If put into force early, emollient and almost cold injections thrown into the bladder may be of service, but their introduction is usually attended with too much pain. Baths, cataplasms to the hypogastrium, and, in nervous complications, anodynes, are however usually soon of avail.

The cystitis from blisters may occasionally be turned to therapeutical purposes, as in incontinence of urine, and paralysis of the bladder.—*Archives Générales*, N. S., tome viii. pp. 532-558.

CASE OF LATE DENTITION.

By Dr. DEUTSCH.

Dr. Deutsch was called in consultation to a man, 34 years of age, who for some weeks past had been the prey of intense pains in the head and face, the origin of which he had at first attributed to several decayed molars, the crowns of which were destroyed. There was very great swelling of the neck and face, abundant discharge of saliva, and difficulty of deglutition. But the most remarkable thing was the appearance of several new teeth. Thus, somewhat in front of the incisors of the upper jaw, four new incisors were found irregularly disposed, two in like manner presenting themselves in front

of the two middle incisors of the lower jaw. New canine teeth also appeared in the upper jaw, between the incisors and the canines. In the lower jaw the new canines sprung up from below and in front of the old ones. The two bicuspids in each jaw and on both sides were pressed backwards by new bicuspids. With respect to the second molars of the upper and under jaw of the right side and of the upper jaw of the left side, the new teeth appeared in the midst of the decayed molars without displacing these, and in such a manner that the remains of the old tooth-walls formed partial envelopes for the new. No new teeth were found corresponding to the first molars, although the old ones were carious, or to the second molar of the lower jaw of the left side. All the third molars were broken away. All the old teeth were so firmly placed as to be removable only by force. The new teeth were very fine ones. From the time of their appearance the patient's suffering ceased, although the effects of this continued some time to be apparent. A skilful dentist gradually removed all the old teeth, and those of the new which had grown out amidst the old were removed with these latter. Some months afterwards the new teeth had assumed a very orderly position, the separations between them being very slight. The patient does not remember losing teeth at the usual period of the second dentition. The author adds, that in his own case two molars of the lower jaw, which were extracted in his twenty-fifth year, were in the course of a year replaced by two new, good, and durable teeth.

Berlin Med. Zeit. 1856. No. 43.

EXCERPTA MINORA.

Asthma Infantis and Craniotabes.—Dr. Schneider relates two cases confirmatory of Elsasser's views on the connexion that exists between the softening of the occiput, and the production of attacks of infantile asthma. In these the phosphate of lime was employed with great advantage.—*Froriep's Notiz.* 1856. Band iv. p. 61.

Dropsy after Intermittent Fever.—M. Thibaud, of Nantes, calls attention to the powerful diuresis often producible by acetate of potass in dropsies supervening upon intermittent fevers, and that when other diuretics may have failed. For this purpose it requires to be given in large doses, commencing with, *e. g.*, ʒij., and increasing to ʒiv., ʒvi., or even ʒx. per diem, copiously diluted with barley-water, and the like.—*Bull. de Thérap.* tome li. p. 337.

Lemons as a Diuretic.—Dr. Trinkowsky, a Russian practitioner, as a result of seventeen years' observation, speaks in high terms of the diuretic powers of lemons. In a case of dropsy, which he gives as a model, they were thus administered:—during the first three days, 1 was taken in 6 doses; and during the next three days, 3 were taken, and the number gradually increased, until 18 were taken in a day, after which the number was diminished. The diuretic effect commenced on the seventh day, and continued during the whole of the treatment.—*Schmidt's Jahrb.*, Band xciii. p. 171.

Incautious Use of Over-shoes.—Dr. Lintner observes that with the comfort derivable from over-shoes in wet and cold weather, there are some inconveniences; and that, owing to the suppression of transpiration they occasion, by cutting off the communication with the atmosphere, they sometimes induce considerable irritation of the feet. He thinks that where over-shoes have to be worn for a long period they should be made of leather.—*Buchner's Repert.* Band. v. 537.

Death from Tartar-Emetic.—An example of peculiar susceptibility to the action of this substance recently occurred to M. Beau. A healthy woman, aged 25, had been confined in the Hospital on the 23rd of March, and on the 28th, on account of a saburral state of the digestive organs, an emetic, composed of 10 centig. (gr. 1½) of tartar emetic and 15 grains of ipecacuanha, was administered. No vomiting ensued, but numerous stools resulted; and as no improvement took place, the emetic was repeated next day at 11. Abundant vomiting and purging followed, prostration set in, and she died at 7. During twenty years' practice M. Beau has observed about ten such cases, in two of which death also took place. In the second fatal case, as in this one, the accident only supervened after the second emetic; and M. Beau lays it down as a rule for future guidance, that when tartar-etic produces abundant evacuations, without inducing sensible melioration, if emetics are still required, ipecacuanha, and not antimony, should be employed.—*Bull. Thérap.* tome li. p. 232.

PROVINCIAL CORRESPONDENCE.

IRELAND.

[From our Dublin Correspondent.]

DUBLIN, March 24, 1857.

THE third conversazione given by the Surgical Society of Ireland during the present session took place in the board-room and library of the Royal College of Surgeons on Saturday evening, the 21st instant. The circulation of the blood was demonstrated on this occasion in the newt, by Dr. John Barker, the curator of the Museum; Dr. Richardson exhibited some delicate microscopic preparations illustrative of the anatomy of the skin. In the library were placed some beautiful recent dissections of the membrana Jacobi, discovered by the present distinguished Professor of anatomy and physiology to the College, while still a very young man.

Preparations have already commenced for the reception of the British Association for the Advancement of Science, which is to meet in Dublin on Wednesday, the 26th of August next. A preliminary meeting of the members of the reception committee, and of the several local committees appointed to make preparations for this event, took place in the board-room of the Royal Dublin Society's house on Saturday last. The chair was taken by the Right Hon. the Lord Mayor. Among those present were the Earl of Meath, a nobleman who is ever foremost in the promotion of patriotic and useful projects, and who enters ardently into any cause which he takes up; the Rev. Dr. Lloyd, president of the Association; Professors Apjohn, Geoghegan, Hamson, Jukes, Barker, and many other members of the literary and scientific circles of this city. It was resolved that the utmost exertions should be made to give the Association a reception in every way worthy of Dublin, and that a subscription list should be forthwith opened to raise a fund for defraying the expenses, usually paid out of local funds, at the meetings of that distinguished body. On the motion of Dr. Apjohn, it was resolved that the first meeting of the reception committee shall be held on Saturday, the 18th of April, and that they be requested to meet from time to time, as may be necessary, to carry out the object of their appointment. It will be remembered that on the former occasion of the Association meeting in this city, some important experiments on the motions and sounds of the heart were undertaken by the "Dublin Sub-Committee of the Medical Section;" it is to be hoped that the Profession, both in Great Britain and abroad, will be ably and numerous represented at the ensuing meeting.

I am not aware that any Medical candidates for seats in Parliament have addressed any of our constituencies, with the exception of Dr. Brady, late M.P. for Leitrim; but Mr. Napier, in his appeal to the electors of the University of Dublin, promises to watch over and protect the interests of the Medical Profession as vigilantly as those of the Bar. I must do him the justice to say that he has ever shown himself as ready as he is competent to fulfil this part.

The annual meeting of the Association of General Medical Practitioners of Ireland took place in the board-room of the Apothecaries' Hall on St. Patrick's-day, which the Association has patriotically chosen for that purpose; W. J. Harrison, Esq., in the chair. Dr. Nalty was chosen president; Dr. Moore, vice-president; Mr. Vance, treasurer; Mr. Shaw, librarian; and Dr. Ryan, honorary secretary, for the ensuing year. A well-merited and unanimous vote of thanks was passed to the ex-president, Dr. Owens, for his conduct during his year of office; and the thanks of the Association were also given to the Governor and Council of the Apothecaries' Hall, for the uniform zeal they continue to evince for the interests of the Profession, and especially for recently sending a deputation to London on the important subject of Medical reform. Three essays were handed in, competitive for the prize proposed by the Association, on "The Relation which should exist between Pharmacy and the other branches of the Profession, and which would best subserve the interests of the Public and of Medical Science in this country." The prize will be adjudicated at the usual monthly meeting on the first Tuesday in April.

GENERAL CORRESPONDENCE.

CAUSES THAT RENDER THE HEART SUSCEPTIBLE TO THE INFLUENCES OF CHLOROFORM.

[To the Editor of the Medical Times and Gazette.]

IN the recent "account of a case in which the administration of chloroform was fatal," so accurately given by Mr. Paget in the *Medical Times and Gazette*, it cannot be a matter of doubt that death occurred from asthenia, or, to use the words of a Dr. Marshall Hall, "Apnoea being the general result; the effect, not the cause, of dying."

It would appear almost presumptuous to differ from Dr. Snow, whose very able and extensive experiments have given so much information to the Profession, and to whom we are mainly indebted for accurate instructions in the administration of chloroform; still the matter is so important as to demand the fullest investigation for future guidance.

Dr. Snow remarks that there is an opinion, supported neither by facts nor reason, that fear on the part of the patient is a cause of death from chloroform; that were this so, accidents might be extremely common, for many patients inhale it, unfortunately, with great fear, only because they have a still greater fear of pain. If chloroform were forbidden in cases where the patient is frightened its employment would be extremely limited, and those who most require it would be entirely deprived of its use; that two cases are on record, one at Mr. Robinson's and the other at St. George's Hospital, where the patients died suddenly from fright but not from chloroform; that excessive fear and an overdose of chloroform may either of them cause sudden death, but they cannot combine to cause an accident in the same case. In fact, as soon as a patient becomes unconscious from chloroform, the effects of fear on the pulse quickly subside.

Now all this is true to a certain extent, but I would beg to contend that it does not embrace the whole truth. First, I would appeal to facts. In the case at St. George's, reported in the *Medical Times and Gazette*, May 20, 1854, p. 516, it is stated that "the fatal event has again happened under conditions the most likely to have prevented its recurrence. It would really appear that these deaths are to be matters of mere accident, and to recur occasionally in spite of every precaution, and under circumstances the most favourable. At St. George's Hospital, until the present, no death from chloroform had ever occurred; and as, almost from the very first, the administration of the drug has been confided to a gentleman regularly appointed to the office, and of large experience, and as the most approved form of inhaler has been constantly used, hopes were beginning to be felt by some that this immunity was more than mere chance, and due in some degree to the precautions mentioned." After mentioning that it had been given by Dr. Snow and Mr. Potter in 1400 cases at this hospital, without any untoward result, it is further added that "it will be seen, that there were in the following case no circumstances whatever in the condition of the patient to excite apprehension, nor did the autopsy reveal any lesion which accounted for the fatal event." The patient, Mrs. H. "before admission had been living in very impoverished circumstances, and it therefore seemed necessary to try to improve her strength by generous diet, before submitting to the operation. On entering the operating theatre, she appeared very nervous. Having been placed on the table on her back, in a half reclining position, the administration of chloroform was commenced. Dr. Snow's inhaler was used. The quantity of chloroform placed in the receiver was a little more than a drachm; and the valve for the admission of air was wide open. Apparently, from excitement, she did not inhale well, but drew her breath by deep catches, and irregularly. Mr. Potter noticing this, spoke to her, begging her to compose herself, and try to breathe more quietly. The same spasmodic efforts at inspiration still continued; very shortly afterwards, at most not more than a minute and a half from the commencement of the inhalation, Mr. Potter noticed her breathing suddenly to cease, and that she had become deathly pale. The inhaler was at once removed. On placing the finger on the wrist, no pulse could be found."

It now devolves on me to prove the statement in my book, ("Aids during Labour," p 78,) "That an emotional state may produce a fatal syncope, or may cause such depression as to

permit of a small dose of chloroform vapour sufficiently diluted increasing it to a fatal extent." Dr. Snow denies the latter proposition which I have put forth. He, by his elaborate and valuable experiments, has discovered, that "when animals are made to breathe air containing eight or ten per cent. or upwards of chloroform, death takes place very quickly, and the circulation of the blood is arrested at the same time as the breathing, and indeed in some cases before the breathing. A very few inspirations of air containing ten per cent. of vapour of chloroform have the effect of paralysing the heart."—*Medical Times and Gazette*, 1853, vol. ii. p. 485. He then maintains that air impregnated with the vapour of chloroform to this extent is fatal to animal life—which is not disputed, and that only in this amount is it so, which I beg strongly to demur to. According to Dr. Snow's hypothesis, the tolerance in all cases is the same; that it makes no difference if mental emotion exist, however intense, provided it do not prove fatal prior to the administration of chloroform, although he admits that it has done so in two cases independent of the influence of chloroform. If, then, we argue from analogy, the heart ought to bear bloodletting and antimony as well in an asthenic as in a sthenic state of system; that, although chloroform paralyzes the heart, it can only do so under certain circumstances, of which the power of the heart at the time is not one of them.

Other causes besides emotional excitement diminish the power of the heart, which, if it be a matter of any importance, deserve attention, viz., disease, especially fatty degeneration of its muscular fibres, which has been noticed in the autopsies of several fatal cases from chloroform, and also abstinence from food, which is enjoined prior to the administration of it in order to avoid sickness. I have remarked in my book, p. 75, "Where there is a weakened action of heart, as accompanies fatty degeneration of its muscular fibres, or where strong emotional excitement occurs, the vapour of chloroform, if not well diluted with atmospheric air, or if given too quickly or too long, may stop the heart's action before respiration ceases." Were death invariably to arise from the vapour of chloroform being too concentrated, and from omitting to use an inhaler—how are we to account for the fatal case at the Royal Ophthalmic Hospital, reported in the *Medical Times and Gazette*, April 14, 1855, p. 363, under the care of Mr. Bowman? "The inhaler used was the one devised and recommended by Dr. Snow; the chloroform was from Messrs. Battley's, had been in stock more than a fortnight, and had been used successfully with many other patients. The administration was intrusted to Dr. Playne, of King's College Hospital. In the commencement of the inhalation the valve of the mouthpiece was so turned as to admit an abundant supply of air, a point to which Mr. Bowman directed personal attention. During the first four or five minutes (more or less) nothing unusual occurred. Dr. Playne, who had his finger on the pulse, had noticed that it rather increased in fulness, and was of good volume. Rather suddenly, however, just as the anæsthetic appeared to be producing its effect, symptoms of excitement occurred. The eyes became fixed and staring, the arms outstretched and rigid, and the face contorted. It was now impossible to feel the pulse, on account of the tossing about of the arms, but, as usual in such conditions, the respiration was noticed to be all but, if not quite, suspended by the spasmodic fixture of the chest. The inhaler was at once removed, and the face and chest of the patient dashed with cold water. Almost immediately after, as the respiration had become extremely feeble and sighing, Mr. Bowman commenced practising artificial breathing, by the application of his own mouth to that of the patient. By this means the chest was made to fill very completely, and the process was kept up almost without intermission for from five to eight minutes." "At the first opportunity which occurred for examining it after the spasmodic struggling had commenced, the pulse was found to be extinct, and it remained so ever after, although there were, as stated, feeble efforts at inspiration. Precautions had been taken to begin the administration with a well-diluted vapour." It is also mentioned that the heart had "some slight deposits on the mitral valve, and its muscular substance was easily lacerable."

Since the publication of my book, a fatal case occurred at Edinburgh which has escaped Dr. Snow's notice, in which "the patient was very apprehensive about chloroform on this occasion, though she had taken it several times before. She took two or three whiffs and became insensible, falling on the

floor. Professor Simpson and Dr. Priestley were speedily on the spot. Every possible exertion by galvanism and artificial breathing was made, and though, at times, encouraging symptoms appeared, yet all proved ultimately unavailing. On dissection, fatty degeneration of the fibres of the heart was found."—*Medical Times and Gazette*, December 1st, 1855, p. 552. Recently we have had Mr. Paget's ably reported case—"a boy of nine years old, of delicate constitution, and of nervous, timid disposition. He was alarmed at the thought of being put to sleep, and of what would be done, and was very averse from taking chloroform; but he was persuaded to inhale it; and though not without resistance, yet with less than is commonly made by patients of the same age, he was brought under its full influence in about three minutes. It was observed that two or three deep inhalations were quickly followed by complete insensibility, and the next few inspirations were stertorous." While preparing for the operation, a period of three or four minutes, "the influence of the chloroform so far passed off that he became sensible, displaced his coverings and pillows, said something expressive of discomfort, and vomited a small quantity of frothy fluid. (He had taken no food since the previous night, when he had had a good supper.) A very small quantity more of chloroform was slowly inhaled," and on some degree of sensibility showing itself, forty drops more of chloroform were poured on wool, inclosed in a fold of lint, which was held half an inch from the face. Before any "change of the pulse was observed the chloroform had been withdrawn." There was nothing unusual in the way chloroform was administered in Mr. Paget's case. It is constantly given in this manner safely in hundreds of cases, and which could not be so were it solely a question of the extent of impregnation of the air with chloroform. This is fighting Dr. Snow with his own weapons, for he argues that were fear the cause, "accidents might be extremely common." It is not, however, the existence of fear, but the intensity of it in certain temperaments that we have to dread. Thousands experience severe frights, but only a few die from them. In this poor lad there appears to have been a great susceptibility to the influence of chloroform. Was this due to nervous depression? Chloroform could not pass off in vapour very freely when poured on cotton-wool, which was encased in lint. Did the sickness prior to the second inhalation, and the patient having taken no food for about twelve hours, favour this depression, or was it the result of it? Dr. Snow argues that he was rendered at first insensible with safety, notwithstanding his fear. At the time of the accident he indicated by movements some degree of sensibility, but was not conscious, and therefore could not be under the influence of fear.

A very intelligent graduate of Cambridge, a patient of mine, who had been twice under the full influence of chloroform for a surgical operation, assured me that the first time he inhaled it he did so without any fear, and that its influence on him was most delightful; but that the second time he was under some apprehension, and that then it produced a most distressing delirium. We all know how dreams affect us; it is, therefore, not impossible, nay, extremely probable, that the feelings which exist on entering into the influence of chloroform may continue and perpetuate these dreams, and consequently affect the heart. I cannot, therefore, admit Dr. Snow's assertion that "as soon as a patient becomes unconscious from chloroform, the effects of fear on the pulse quickly subside." All that I desire to assert is, that a state of nervous depression existing at the time chloroform is administered is unfavourable, and will in some few cases lead to a fatal result. I also cannot but think that the fatal case at St. George's will not bear out Dr. Snow's conclusion, and that it favours mine. This is not and ought not to be a matter of private feeling and opinion, for, if correct—which I leave for the Profession to decide—it has an important practical bearing. It cannot, too, but be admitted that if one of the greatest boons ever offered to mankind—if not the greatest—tends to paralyse the heart, as asserted by Dr. Snow, under certain circumstances, and which I fully believe, then we ought to endeavour to avert this, and I still feel more fully convinced than ever that the first rule I have given in my book is a correct one: viz. "Always feel the pulse, and carefully examine the state of the patient immediately before the administration of chloroform. If the pulse be feeble and the woman excitable, or if hysteria exist, first give a diffusible stimulus—as a dose of sp. ammoniæ comp.:—and then very

cautiously and *gradually* administer the chloroform, with not more than two or three short inhalations at a time." Again, in rule 5, "Do not let the patient *gasp* at the inhaler, and inhale too rapidly; if she persist in doing so, discontinue for a time the inhalation;" and in rule 11, "Give some stimulant, from time to time, as may be judged admissible, especially if vertigo or weakness be complained of, even if the pulse do not alter in its character."—P. 87.

Dr. Snow's reputation is deservedly too high to be in any way affected by any remarks made by so humble an individual as myself; but I feel constrained for the sake of science to adduce them, and also to endeavour to explain how chloroform does prove fatal when administered under the supervision of men of acknowledged skill and ability. It is a small matter *per se* to urgently advise a diffusible stimulus to be given in *all* cases prior to the administration of chloroform, and when intense nervous depression exists to first overcome its intensity. It can do no harm, and may avert fatal results. I am, &c.

31, Bayham Terrace,
Camden Town, Mar. 21, 1857.

J. R. PRETTY, M.D.

ROYAL MEDICAL BENEVOLENT COLLEGE.

[To the Editor of the Medical Times and Gazette.]

SIR,—In reference to an intended Extraordinary General Meeting of Governors of the above College on the 3rd of April next, having for its object the reduction of the annual charge for Exhibitioners from £40 to £30, your advertising columns of Saturday last contain an announcement in which occur the following expressions:—"Notice is hereby given that, in obedience to a requisition, properly signed, which has been received by the Council," etc.; and, "As the Act of Parliament incorporating the Royal Medical Benevolent College enacts that an Extraordinary General Meeting of the Governors shall be called upon the requisition of twenty Governors, the Council have called such a meeting," etc.

Now, as from this phraseology an inference has been very naturally drawn, that a certain memorial, which was presented to the Council on the 7th of January last, was signed by twenty Governors only, it is but fair to state that upwards of 140 signatures were appended thereto, and that many more had been obtained, but, unfortunately, were not forwarded in time for publication.

Of the Governors generally, but more especially that section of them who, being influenced either by friendly relations with the Council, or by a desire, so frequently evinced on such occasions, to side with those in authority, might be disposed to vote on this momentous question without giving to it that consideration which it deserves I would earnestly entreat that they would suspend their judgment until the day of meeting, when it is believed that such facts and arguments will be adduced as will substantiate the possibility of keeping that promise on the faith of which the Profession and the public subscribed many thousands of pounds, and the violation of which has created such extensive and intense dissatisfaction. I am, &c.

Islington, March 23.

JOHN BROWN.

ON THE EFFECT OF CHLOROFORM UPON AMPUTATION WOUNDS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I am as tired of writing letters on the subject of chloroform as, I suppose, your readers are of seeing them; but being requested (as I and others in my position were by your Journal) to furnish facts bearing on the question, I could not refrain from doing so. I will now ask you to insert these few lines, in answer to Dr. Arnott's last communication, and then to excuse me from further share in the controversy, at least, until something new shall have been contributed to it.

Imprimis, I would have your readers remember, that the statistics hitherto produced of the mortality before chloroform are utterly inadequate to settle the question; and that the whole of Dr. Arnott's argument is, therefore, raised on a foundation, to say the least of it, very suspicious. Next, that whether the increased prevalence of pyæmia, during the three years selected by Dr. Arnott for comparison with those previous to chloroform, is properly designated or no by the word "epidemic," such increased prevalence is still a fact, which

rests not only on statistics, but on the observation of those who saw the cases,—a fact which has been proved in all classes of cases which have been the subject of post-mortem examination, and which it is necessary to connect with the administration of chloroform by some intelligible reasoning, before the latter can be accepted as the cause of the increased mortality, even if the mortality could be shown to have increased. I have relied principally on the statistics of St. George's Hospital, because those statistics represent cases which have been noted during life and examined after death. The same can hardly be said for the others, to which Dr. Arnott refers. The Profession are under a considerable debt to the gentleman whose unwearied activity and industry have collected so valuable a mass of the statistics of operation in your Journal; but I am sure no one would be more ready than your reporters to admit that those cases are not given in a form which allows of reasoning on the cause of death in individual instances; and that, without detailed information on the previous symptoms, course of the disease, and post-mortem appearances, such reasoning is always idle, and frequently (as I believe in this instance) mischievous also. Your readers should not forget either, that Dr. Arnott's original assertion was, that chloroform causes death by predisposing to pyæmia. This opinion he did not support by any facts; and when, in the only instance in which it was tested by facts (I mean the statistics which I furnished), it was found to be entirely unfounded, inasmuch as pyæmia prevailed equally in cases not narcotised as in those which had been treated by chloroform, he suddenly abandoned it, and took refuge in a vague assertion about "other secondary affections." Now, in an equally vague and obviously hesitating manner, he insinuates rather than reasserts his former opinion, supporting it by a comparison between two years at St. George's Hospital, 1844 and 1855—each forming a set of seven cases; the object or bearing of which I am at a loss to divine. Such a method of treating a grave medical question it has never been my lot to observe before; nor is it easy to reply to a reasoner who shifts his grounds so frequently. I have endeavoured to sustain an opinion, based on the close observation of Hospital practice during several years, by the best arguments at my command; but it is impossible by any arguments to strictly prove a negative in such a question as this, nor ought the *onus probandi* to be thrown upon the person who supports the negative side. I am surprised that your appeal to those who have had the opportunity of observing operative practice in our Hospitals remains unanswered by any one except myself, and hope that this omission may be speedily supplied. Until we are more sure of our facts, conjectural arguments, such as those of Dr. Arnott, are worth nothing.

I may conclude by acknowledging the moderation and courtesy with which Dr. Arnott has conducted his share of this correspondence, and by regretting that the task of replying to what I must consider as his erroneous assertion, was not undertaken by some one more competent to perform it satisfactorily. I am, &c. T. HOLMES.

4, Vigo-street, March 24.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, March 3, 1857.

(Continued from page 297.)

Dr. Markham exhibited a specimen of

OPEN FORAMEN OVALE—LOUD SYSTOLIC CARDIAC BRUIT—TUBERCULOSIS OF LUNGS.

The little girl, aged 4, in whom these pathological conditions were found, had been always a delicate child. Dr. Markham saw her on the 8th of February, and found a loud bruit along the base of the heart, and in the whole of the left subclavicular region, not audible to the right of the sternum, and scarcely at all below the nipple. On the 17th she was seized with violent convulsions. The following day a very careful examination was made of her chest, and the same bruit was found, but much louder, longer, and rougher; audible now over the whole precordial region and to the right o

the sternum, very loud also in the upper half of the inter-scapular space on both sides of the spine. The respiratory murmur was everywhere clear and loud, and the percussion good; no *râles* of any kind were audible. The respiration was easy. There were convulsive twitchings of the left shoulder and arm; the child was partially insensible, though readily roused; the skin burning, and the pulse very rapid. The mother now informed Dr. Markham that the child had always been subject to cold bluish feet, and she pointed out some bluish veins around the finger nails. These were the only symptoms, very slightly marked, of cyanosis. *Necropsy* showed that the heart was perfectly healthy in all respects, excepting in the existence of an open foramen ovale. Through this opening the point of a finger passed readily from the right to the left auricle; but, on the left side of the septum, it was closed by a peculiarly attached valve. This valve, about one-third of an inch wide, was attached at the upper and back borders of the opening, but was free in its central parts; thus, it would allow a current of blood to flow freely from the right to the left auricle, but would flap against the opening and close it, if the current set in an opposite direction, leaving merely two crescentic slits open at its margin. Dr. Markham suggested that the bruit was formed at the foramen ovale, and that the fact was not to be rejected, simply because such a bruit had not yet been admitted and recognised in auscultation. His reasons were:—1. Because there is no other means of accounting for the bruit, which had been on several occasions most carefully observed. 2. Because there is nothing in the nature of the parts involved which is repugnant to the fact; the bruit being coincident with the systole of the ventricles, necessarily occurred during the auricular diastole. Certainly, a bruit at the foramen ovale coincident with the auricular systole seems a thing impossible; for the blood during such systole must be subjected to a like pressure in both auricles, and, therefore, no current could pass from one to the other. But, during the diastole, the blood rushes in rapidly from the vena cava and pulmonary artery into the auricles, and there is nothing then to prevent a current of blood passing through the opening; and this current, it is conceivable, might readily occasion a bruit, by throwing the membranous valve into vibrations. The objection that the current of blood has not sufficient force to produce a bruit in such case, is answered by the fact, that a strong current is not always necessary to produce a loud bruit, as proved in the case of the roaring *bruit de diable*, heard in the cervical veins, and of a loud bruit occasionally heard even over the radial artery. Then, again, in cases where the foramen ovale has been found open after death, and where no other defect existed in the heart, it is unfair to assume that no murmur was present. In such cases, there is no cardiac disturbance, and, therefore, there is no examination made during life. And why should it be assumed, that in those cases of open foramen ovale, associated with other defective conditions of the heart, in which murmurs were heard during life; why should it be assumed, that the murmurs always have their origin in those other defective conditions, and never in the open foramen ovale? For these reasons, Dr. Markham thought it much more rational to believe that a loud and low bruit, such as this, heard on several occasions, and most carefully observed at a peculiar part of the thorax, arose at an open foramen ovale, than to acquiesce in the proposition that some inexplicable mystery involved the subject. Another fact of great interest was observed in this case. Seventeen hours before death, on a most careful stethoscopic examination of the lungs, nothing abnormal was detected; the respiration was clear and loud, the percussion loud, and no *râles* were audible; and yet miliary tubercles were found thickly scattered through every tube of each lung. The fact is admitted, but the demonstration of it is rare. It is explained thus: The percussion sound is unaltered, because healthy air-containing tissue intervenes between the tubercles; the respiratory murmur is clear, because the air enters freely into the lungs; there are no *râles*, because there is no exudation yet thrown out. "Solitary tubercles," says Skoda, "of themselves produce not the slightest change in the percussion-sound; we can only surmise their existence." This case proves, that the absence of physical signs is no proof of the absence of tubercle in the lungs; and, therefore, condemns such terms as *pre-tubercular* stages of phthisis as unwarrantable and hypothetical. It seems also to prove the existence of a cardiac bruit, hitherto unrecognised by auscultation.

Dr. THEOPHILUS THOMPSON asked if the child had shown any blackness of surface

Dr. MARKHAM—Nothing remarkable. In cold weather its mother had observed that its feet became more than usually blue and chilly.

Dr. CAMPS related a case in which the cyanosis was extreme, and a very loud bruit was heard over the heart up to the time of death.

Dr. OGLE observed that patency of the foramen ovale was so common that no importance could be attached to it. In about one hundred indiscriminate examinations made with the view of determining this question, he had found it open in about a third of the cases. He felt sure that usually it had nothing to do with cyanosis.

Dr. GRAILY HEWITT could quite confirm Dr. Markham's statement as to the occasional absence of physical signs of living disease. He had himself met with a similar one.

Dr. QUAIN stated that he had occasionally met with such cases as Dr. Markham had described, in which the post-mortem conditions did not correspond with the auscultatory phenomena, but in such he had always preferred to doubt his own powers of observation rather than hastily to infer that a diseased condition could exist without signs. He did not wish, however, to extend this distrust to Dr. Markham's statements.

Dr. MARKHAM defended his position, and stated that he could not feel the least possible doubt as to the accuracy of his observations, as they had been made repeatedly and the notes taken at the time. He protested against reasoning which would doubt the accuracy of carefully ascertained facts because they seemed irreconcilable with previously entertained opinions.

Dr. THEOPHILUS THOMPSON did not feel any inclination to doubt Dr. Markham's statements. He had never seen cases of extensive tuberculosis with *râles* or dulness, but was much surprised that, in the case described, the expiratory murmur was stated to have been normal. He was almost always, in the very early stages of phthisis, able to detect some deviation from the healthy character in this manner.

Dr. HARE had met with a case of phthisis in which the constitutional symptoms were severe, but in which there was no dulness whatever, and a few sonorous rhonchi were the only suspicious physical sign. In another a loud cardiac murmur had been repeatedly noted, but disappeared a few days before death. At the autopsy no morbid condition of the heart could be found, excepting a very large tricuspid orifice.

Dr. PEACOCK observed that cases like that referred to by Dr. Camps, in which there was intense cyanosis, were, in a very large proportion, instances of contraction of the pulmonic orifice, and of defect in the septum ventriculorum, by which the aorta received its blood both from the right and left ventricles. In such cases, therefore, there is a twofold source for the murmurs which are heard during life; the diseases of the pulmonic valves and orifice, and the meeting of the two columns of blood in the ascending aorta. In a case like that of Dr. Markham, there was great difficulty in explaining the murmur which had been heard, for there was no apparent source of obstruction which could have given rise to it. The faulty condition of the valve of the foramen ovale, he could not think had occasioned it, for when there is no obstruction at any of the orifices of the heart, he did not believe that a current of blood could flow from one auricle into the other, sufficient to give rise to a murmur. As regarded the difficulty of diagnosing the condition of the lungs in the case, he could to a considerable extent confirm Dr. Markham's statement. Generally, as had been so well explained by the President in his published "Lectures," in cases of acute miliary tubercle, the symptoms excited were those of acute or subacute capillary bronchitis, and the ordinary signs of tuberculous deposit might be altogether absent, or might only appear towards the end of the illness. In a case, however, which he had seen during the last autumn, while there were all the general symptoms of acute capillary bronchitis, there were none of the physical signs. There was scarcely any, if any rhonchus, or deficiency of resonance on percussion, and the only peculiarity noticed was the harsh or puerile character of the respiration. In cases where the patient laboured at the same time under cerebral disease, the general symptoms might also be absent, so that the pulmonary affection might be entirely masked.

Dr. RISDON BENNETT could quite confirm Dr. Peacock's

observations as to the fact that the symptoms, acute miliary tuberculosis, were those of capillary bronchitis. He had, however, often noticed in such cases another sign which he thought of great importance, and that was extreme breathlessness. The dyspnoea was often altogether out of proportion to any pulmonary disease revealed by the stethoscope.

After some further remarks, the specimen was referred to Dr. Peacock and Dr. Quain for re-examination and report.

Mr. SYDNEY JONES showed a specimen of

ATROPHIED KIDNEY.

It was taken from a boy, aged 15, who died of peritonitis. With the exception of a mild attack of measles at an early age, he had always enjoyed good health. On making the post-mortem examination, the right kidney was found from two to three times its normal size, but healthy, and occupying its normal position; but on the left side a mass was found, weighing about a drachm, and occupied by cysts. A few of these cysts were filled with fluid, but most of them were collapsed and had corrugated walls. The microscope showed it to be made up of fibrous tissue, white and elastic, among which were found microscopic cysts, atrophied Malpighian bodies, and altered renal tubes, in such abundance as to leave no doubt of the nature of the specimen. In the site of the pelvis of the kidney was an emulgent vein, pervious, but the artery and ureter formed impervious cords.

Dr. HARLEY showed a specimen of

SOFTENING PART OF THE STOMACH, &c., AFTER REMOVAL OF THE SUPRA-RENAL CAPSULES.

The right capsule had been removed from the animal, (a white rat,) on the 5th of February, and on the 14th of the same month, as the rat seemed to have recovered from the first operation, the left capsule was likewise extracted. Nothing particular was observed in the condition of the animal till about nine days after the last operation, when the hair was noticed to have fallen out from around the neck and back part of the head; the skin however remained perfectly white. In a day or two afterwards the animal refused to take food, began to get gradually thinner, and died 25 days after the removal of the right, and 16 days after the extirpation of both supra-renal bodies. On *post-mortem* examination the skin where the hair had fallen off was found to be covered with a thick crop of young hairs, about one-eighth of an inch long, showing that the affection of the skin had not been permanent, but only temporary. On opening the abdomen the intestines were found to be reduced to a jelly-like mass, their coats were exceedingly thin, and so transparent that the air-bubbles could be distinctly seen floating backwards and forwards in their interior. The right half of the stomach was found in a similar condition; it contained nothing but a little clear amber-coloured mucus, of an alkaline reaction. The softening could not, therefore, be due to the *post-mortem* action of gastric juice. A similar condition of the stomach and intestines is not unfrequently found in badly nourished children, especially such as have died from disease of the ganglionic system of nerves; and Dr. Harley remarked that he attributed the softening in this case to the injury done to the branches of the semilunar ganglion and solar plexus in removing the organs. In all the animals which he had seen die after the operation the symptoms immediately preceding death were very similar to those following upon injury done to the organic system of nerves. He attributed the affection of the right half of the stomach to the fact of the removal of the right capsule being attended with much greater difficulty and greater injury to the nerves than that of the left, whose relation with the neighbouring parts are less intimate. The wound on the left side of the abdominal wall was so well healed, that it could only be detected on minute inspection, and the place where the capsule had been showed no traces of the operation. On the right side, however, the liver and part of the small intestines were adhering to the wound. The skin had been carefully examined, but no marks of any discoloration or creasing could be detected.

Mr. HURCHINSON remarked that the advocates of the doctrine of the vital importance of the supra-renal bodies must feel much indebted to Dr. Harley for supplying them with so conclusive a proof of the opinion, as the case now brought before the Society seemed to him to be. The animal had lived much longer after the extirpation than in any previous experiment. The operation had been very skilfully per-

formed, and the animal had perfectly recovered from its effects without peritonitis or local mischief. It was quite clear that death was not from the operation directly, and he thought it was fair to assume that it was from the want of the organs removed. The animal had languished away with exactly the train of constitutional symptoms which the advocates of Dr. Addison's views would have expected. As for the non-occurrence of change in colour, there had not been time enough for it to take place. He reminded Dr. Harley, that the opinion entertained by many was that the supra-renal bodies were not glands, but organs connected with the ganglionic nervous system, and quite agreed with him in supposing that the loss of appetite, emaciation, and death were the results of disturbance of that system. The softening and thinning of the stomach he thought was important, as being a very consequence of other and more important lesions.

Dr. SALTER stated that the thin condition and transparency of the intestines, and of part of the stomach, was not uncommon in rats; and his opinion was confirmed by Dr. Snow, both stating that they had often seen it in vivisections on these animals.

Dr. HARLEY could feel no doubt that the softening was much more extensive than that seen in healthy animals. He differed entirely from Mr. Hutchinson's opinion that the rat had died for want of the supra-renal bodies, and believed it was from accidental injury in the operation to the ganglionic nerve trunks. He did not accept the theory of the supra-renal bodies being connected with the ganglionic nervous system.

EPIDEMIOLOGICAL SOCIETY.

MONDAY, March 2.

Dr. BABINGTON, President, in the Chair.

Professor MURPHY read the concluding part of a paper on
PUERPERAL FEVER.

The author alluded to a former paper on the subject, in which he objected to the propriety of considering this disease as an inflammation of one or other of the tissues. He then pointed out that neither in the mode of attack, in the symptoms, in the post-mortem appearances, nor in the treatment, did puerperal fever agree accurately with peritonitis. A closer resemblance to phlebitis was admitted, because both were blood diseases; but he denied that they were identical. He proceeded to explain his views of the nature of the disease, that it was the result of a poison, and obeyed strictly all the laws of morbid poisons. Its action was definite and specific; the seat of that action was the serous surfaces, especially the peritonæum and uterine veins, chiefly because of the rapidity of their absorption. He denied that the action itself should be considered a specific inflammation, although he admitted that in certain cases inflammation may be excited. The term inflammation was used too extensively, being made to embrace actions perfectly opposed to each other. The design of inflammatory action is to preserve or repair organised structure, yet the term is given to actions that destroy it. Thus cancerous inflammation, tubercular inflammation, are expressions sometimes used in such a manner as to mean that cancer and tubercle were only forms of inflammation. So in the infantile lung post-mortem appearances were described as lobar, lobular, vesicular pneumonia, which were caused by collapse of the lung. The tendency of a poison is to destroy organisation; it is incorrect, therefore, to consider its action as a specific form of inflammation, which whenever it takes place is only for the purpose of limiting the action of the poison, and in this sense, just as the deposition of tubercle on the peritonæum is accompanied by peritonitis, so the puerperal poison may excite peritonitis; but the more powerful the poison the less peritonitis, and the weaker its influence the more distinctly are the evidences of inflammation observed. The action of the puerperal poison is on the blood; the quantity of fibrin is increased; the quality deteriorated. A profuse exudation of morbid fibrin takes place having some of the properties of healthy fibrin; it is not organisable, dissolves into a creamy substance, which melts into a fluid like pus, and mixing with serum forms the abundant "lactescent fluid" of authors. Exudations are not found in the veins because they are not adhesive, but dissolved fibrine, like pus, is found abundantly. The puerperal poison seems a contrast

to the typhus poison, which destroys fibrine; yet the typhus poison absorbed by a parturient patient will cause puerperal, not typhus fever. It is the same with erysipelas. The action of the poison is modified by the dose as well as by the temperament and constitution of the patient. Puerperal fever does not attack all indifferently, but selects its victims. The most important feature of this law is the manner in which the characters of the disease are modified by the quantity of the poison absorbed. When it is in excess the patient may die without any other symptoms than a fluttering pulse, and cold livid surface. On the other hand, the dose may be so small that true inflammation is set up to arrest it, and thus peritonitis, phlebitis or arthritis, take place. Hence the contradictions among authors; those who meet the latter class of cases calling the disease peritonitis, while those who witness the former stand aghast at symptoms which no theory of inflammation can explain. The coexistence of whooping cough and measles, of syphilis with erysipelas, proves that two poisons may each set up their specific actions in the same person at the same time. Erysipelas and puerperal fever have occurred in the same patient; but the author generally found erysipelas to precede or follow puerperal fever rather than accompany it. Erysipelas excited puerperal fever; but when the latter was at its height, the former disappeared. The author objected to the opinion that erysipelas and puerperal fever were identical, and did not consider those cases described by Good, in which the peritoneum was pale and colourless, as puerperal fever at all: they might be instances of erysipelas, if this poison ever attacks serous membranes. The author considered the poison as a contagion, just like the cadaveric poison which seems so similar to it; and briefly enumerated the symptoms of the disease, to explain the principle which should guide us in the treatment. According to its strength, the constitution makes an effort to get rid of the poison, whether by vomiting or purging, by the skin or by the kidneys. The observation of these efforts led Douat to use emetics, Boer kermes mineral, Denman tartar emetic, and Armstrong salts and senna. If the effort fail, the poisoned blood accumulates at the centres of the circulation, which are relieved by a prompt and bold depletion. For such a purpose, 30, 40, or even 50 ounces of blood have been taken with decided benefit, but depletion should instantly follow the rigor, because, if time is lost, the very same treatment may only hasten dissolution. Camphor and turpentine have been recommended in the treatment of this fever. These remedies are not only stimulant but anæsthetic, and are useful not alone in supporting the constitution against the attack, but, by diminishing pain, they lessen nervous exhaustion. Reasoning on these facts the author tried chloric-ether with great advantage, and recommended it strongly to the consideration of the Profession. General rules cannot be laid down for the treatment. If the dose of the poison be a maximum, nothing will save the patient; if in such quantity that the constitution can make some effort to get rid of it, much of our success will depend upon a close observation of the manner in which the effort is made. Prompt depletion has saved many a patient. The judicious use of emetics, purgatives, diaphoretics, and even diuretics has arrested the attack by aiding a natural effort. If the dose of the poison be a minimum, then peritonitis or phlebitis becomes prominent, and must be treated as such. Thus, what are called the inflammatory and the atoxic forms of the disease merely signify the degrees in the dose of the poison. The author alluded to the importance of prophylactic agents, to ventilation, and the improvements lately introduced; to chlorine as a means of destroying the poison; and to anæsthetic agents as a means of blunting the sensibilities of the nervous system, and diminishing the activity of absorption. In this sense he considered chloroform extremely valuable, and so far from fearing its influence in causing puerperal fever, he looked upon it as a preventative.

A discussion followed, in which Dr. Tripe, Dr. Babington, Dr. Chowne, Dr. Milroy, and Mr. Hunt took part.

GUY'S HOSPITAL.—At the last meeting of the Pupils' Physical Society, Mr. Cock in the chair, the prize was equally divided between Mr. R. W. Berkeley and Mr. Thomas Joyce, for their excellent essays on the respective subjects of Phthisis and Continued Fever.

YELLOW FEVER prevails at the South American ports. At Bahia and Rio it was of a very malignant character.

NORTH LONDON MEDICAL SOCIETY.

MARCH 11.

Dr. JENNER, President, in the chair.

Mr. LORD read a paper on the

INSIDIOUS APPROACH OF DISEASE,

and noticed forcibly the little power which could be exercised over chronic disease, as a motive for aiming to arrest early indications of illness, and to remove the remnants of acute disease, which so frequently pave the way to irreparable mischief. He argued that though the application of remedies to the cure of disease was the obvious duty of the medical practitioner, it was his more sacred duty to aim at preventing all disease; and urged a far wider range for preventive medicine than that embraced in drainage, ventilation, and water supply; arguing that longevity is man's natural right on earth, and that nature's law in this respect is, "Health, till death through ripe old age." Mr. Lord reprobated the wide doctrine of hereditary disease, observing that in few cases except in direct contamination in utero, as through small-pox, lues, etc., can more than the tendency to disease be established. This tendency should be eradicated or controlled by judicious care and management.

In respect to acquired disease, particularly subacute, the author showed that every state of mere anæmia demanded vigilant care and discriminating succour, since what are called "trifles" often mark the advent of malignant disease, and premature degeneration. Under the idea of mere debility, no efforts are made to arrest incipient change of structure or impurity of blood. The humoral pathologists were to be highly regarded, since more disease and needless death occur through vitiated blood than from any other agency. That the dyscrasia should be prevented from a crisis in gout or rheumatism, in anthrax or pyæmia; that even phthisis pulmonalis insidiously approaching through diminished vital action in the air cells may be foiled, as is contended by Dr. E. Smith, before tubercular deposit has taken place; that through simple chronic dyspepsia and imperfect sanguification or fæcal fermentation, factories of blood poison from within, equally with others from without the body, engender and circulate their deadly products over the brain and nervous centres, giving rise to cancer, &c. Diabetes, "Bright's disease," and that of the supra-renal capsules, were given as instances of the treacherous advance and hopeless character of confirmed disease. Of these, as of fatty degeneration, and atrophy, it was of small value to be only able to say with Mr. Paget, "The explanation probably lies far among the mysteries of the chemical physiology of nutrition." Mr. Lord noticed the approach of morbid conditions of the nervous system, quite distant from recognised organic lesion, which creep on most insidiously, such as the "petit mal" of epileptiform character,—chorea and insanity. The opinion of Dr. Winslow, who referred insanity "in all cases to some lesion or disturbance of the medullary matter," was contrasted with that of Dr. Barnett, who regarded the blood as the seat of the disorder. Finally, that in respect of mental diseases, as in most other more essentially physical, a timely caution would avert or quite prevent, if, as was said by Dr. Currie in 1797, "we could rely as much on the wisdom, as on the power of our species."

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, March 19, 1857.

BAILEY, JOHN HENRY TROLLOPE, Colchill.
 BELL, JOHN HENRY, Bradford.
 FANSON, WILLIAM ANDREW, Newcastle-on-Tyne
 LAVER, HENRY, Paglesham, Essex.
 MORGAN, GEORGE BLACKER, Dublin.
 MURPHY, WILLIAM PONSONBY, Harrington.
 ROBERTS, DAVID WALKIN, Manchester-street.
 SIBBALD, JOHN, Edinburgh.
 THORBURN, JOHN, Manchester.
 WILLIAMS, JOSEPH, Westerleigh, Bristol.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners, on Friday, the 20th March:—

BATESON, J. M., Kirkby Lonsdale.
BELL, J. H., Bradford.
CLAPTON, W., Stamford.
FIELD, J., Canada West.
GEORGE, C. F., Kirtou-in-Lindsey.
HAYWARD, J. R. S., Bristol.
JOHN, W., Penzance.
LYS, F. D., Lymington.
MERLION, J. PARR, Co. Dublin.
OPPENHEIM, L., Army.
STILWELL, H., Uxbridge.
TIBBITS, W. H., Warwick.
WOODHOUSE, T. J., Hackney-road.

Also on Wednesday, 25th March:—

BIDDLE, H. C., Edmonton.
CAIRD, W. E., Exeter.
EVANS, A., Llandyssil, Cardiganshire.
JAMES, J. D., Bedwellty, Monmouthshire.
PUGHE, H. R., Bala, North Wales.
RADLEY, W. H., Doncaster.
RUSSELL, J., Durham.
SMITH, W. J., Islington.
THOMAS, J., Cardigan.
WOOD, W., Siddington.

DEATHS.

EVANS.—March 1, at Stockwell Park-house, Surrey, Thomas Evans, Esq., M.D. Mr. Evans was born at Kidwelly, in South Wales, in 1800, and was educated at Trinity College, Dublin. His professional studies were pursued in England, Germany and France, and he held a successful practice in London for many years. Having married a daughter of Mr. Angell, of Rumsey House, Wilts, and being much occupied of late years in attending to his father-in-law's interests and property, especially in the neighbourhood of Stockwell, he was reluctantly compelled to discontinue his professional practice. He found time, however, for many good and philanthropic works, and rather increased than otherwise his ever-ready exertions to assist many deserving persons whom he knew to be struggling honourably against the difficulties and hardships of life; and these services were to him a source of much delight. Every movement which he believed would contribute to the removal of wrong and the establishment of what is just and right among men, received from him spontaneous and zealous support; and very many of the questions of the day found in him the advantage of an energy and activity, combined with a clear power of expression, and wit which he possessed in an eminent degree. He has died respected and regretted by a very large circle of friends, and beloved by a deeply-attached family.

MARSH.—March 20, at Shaftesbury Villas, Kensington, of scarlet fever, Edwin Hooker Marsh, Esq., Surgeon, in his 30th year. (Firm of Turner and Marsh). M.R.C.S.E. and L.M., 1854; L.S.A., 1855.

VERITY.—March 18, at Dean Lodge, Bedfordshire, Richard Verity, Esq., M.D., aged 69, beloved and deeply lamented by a large circle of friends.

APPOINTMENTS.

Dr. Robert Fergusson has been appointed Physician Extraordinary to Her Majesty.

Dr. Page has been appointed Physician to the Economic Assurance Society, in the place of Dr. Nairne, the New Commissioner of Lunacy, resigned.

TESTIMONIALS.

DR. PENNY.—Dr. Penny, Demonstrator of Anatomy in the Neville Hall College of Medicine, Newcastle-on-Tyne, being about to proceed to India, as Surgeon to the East India Company's forces, a meeting of the Students was held in the College on Monday last, to mark their appreciation of his services, by presenting him with a sword and case of surgical instruments, the sword bearing the following inscription:—"Presented, with a case of surgical instruments, to James Champion Penny, Esq., M.D., by the Stu-

dents of the Neville Hall College of Medicine, Newcastle-on-Tyne, as a mark of their esteem for his professional attainments, and of gratitude for his kindness and unwearied attention to their interests while Demonstrator of Anatomy in the above-named College.—Newcastle-on-Tyne, March, 1857."

MR. HOLDEN.—The students of St. Bartholomew's Hospital invited Mr. Holden, one of the teachers attached to that institution, to a dinner on Thursday evening, at Anderson's Hotel; Mr. Callender, F.R.C.S., in the chair; on which occasion a handsome silver dinner service was presented, with the following memorial:—"To Luther Holden, F.R.C.S.—Sir, We, the undersigned students of St. Bartholomew's Hospital, appreciating the able and willing assistance you have rendered us as a teacher, and the kindness and cheerfulness with which you have aided our studies as a friend, beg your acceptance of this memorial, together with the accompanying testimonial. We desire, also, to express our deep sense of the obligation we are under for the many valuable anatomical preparations and diagrams you have contributed to the Museum and dissecting-rooms, and the able literary productions, by means of which you have so simplified our professional studies." The service of plate has engraved on it the crest of Mr. Holden, and the modest inscription, "To Luther Holden, from the students of St. Bartholomew's Hospital, 1857." At the dinner were noticed several of the physicians and surgeons, Dr. Baly, Dr. Kirkes, Mr. Paget, etc. About fifty gentlemen sat down.

THE COX TESTIMONIAL.—A meeting of the Committee for promoting the Testimonial to Mr. Sands Cox was held on Monday afternoon, at the Queen's College; the Mayor, John Ratcliff, Esq., in the chair. In opening the proceedings, the Mayor said that all then present were doubtless as well aware as himself how Mr. Cox had spent five-and-thirty of the best years of his life in carrying on works which had become an ornament and an honour to the town. The noble building in which they were met, and also the Queen's Hospital, originated in lectures which Mr. Cox delivered in the back parlour of his father's house; and not only had he been the founder of these institutions, but he had been their chief supporter, from the time of their establishment until now. Birmingham had in more ways than one reaped the benefit of Mr. Cox's exertions. He had established in it a School of Medicine, which had become famous and respected throughout the country. Mr. Suckling, the Honorary Secretary, stated that subscriptions had already been received to the amount of nearly £900. Resolutions in favour of a canvass of the Midland districts, and other measures for carrying out the object of the Committee were moved, seconded, and adopted.

rites attending CHILD BIRTH IN SIAM.—Sir John Bowring, in his book on Siam, says:—"The event has no sooner taken place, than the mother is placed near a large fire, where she remains for weeks exposed to the burning heat; death is often caused by this exposure. So universal is the usage, so strong the prejudice in its favour among high and low, that the king himself has vainly attempted to interfere; and his young and beautiful wife, though in a state of extreme peril and suffering, was subjected to this torture, and died while 'before the fire'—a phrase employed by the Siamese to answer the inquiry made as to the absence of the mother. A medical missionary told me he had been lately called in to prescribe for a lady who was 'before the fire;' but ere he had reached the house, the patient had died, and both body and funeral pile had been removed."

DEATHS IN PUBLIC INSTITUTIONS IN 1856.—The number of persons who died in 116 public institutions was 10,381. Thus nearly 1 person out of 5 who died in the year, closed his days under a roof provided by public law or private charity. The respective numbers are as follows:—In 46 workhouses there were 5797 deaths; in 14 prisons, 81; in 4 Military and Naval Asylums, 304; in 13 general hospitals, 2859; in 7 hospitals for special diseases, 612; in 4 lying-in hospitals, 14 women, and 31 children; in 7 Military and Naval hospitals, 282; in 24 hospitals and asylums for foreigners, 61; and in 20 lunatic asylums, 340. Of the gross number, 5847 were males, and 534 females.

DEATHS REGISTERED in the Metropolis for the Week ending Saturday, March 21, 1857.

CAUSES OF DEATH.	In the Week ending Saturday, Mar. 21, 1857.						Averages of Temperature and Deaths in 10 Weeks.
	Deaths of Persons.						
	AT ALL AGES.	Under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.	At 80 Years of Age and Upwards.	
Mean Temperature	Mean temp. 45° 1						41° 3
ALL CAUSES	1195	584	143	188	229	45	1197·7
SPECIFIED CAUSES	1188	583	143	188	229	45	1194·1
DISEASES:—							
1. Zymotic Class	197	163	9	9	13	3	231·2
2. Dropsy, Cancer, and others of uncertain seat	42	5	2	12	20	3	44·2
3. Tubercular Class	227	84	76	53	14	..	201·6
4. Of Brain, Nerves, etc. ..	132	58	11	21	36	6	133·3
5. Of Heart, etc.	49	3	9	19	15	3	49·0
6. Of Respiratory Organs ..	292	160	14	41	69	8	258·5
7. Of Digestive Organs ..	78	43	4	15	16	..	66·8
8. Of Kidneys, etc.	8	..	1	4	3	..	13·5
9. Of Uterus; viz. — Puer- peral Disease, etc. ..	10	..	8	..	2	..	9·9
10. Of Joints, Bones; viz.— Rheumatism, etc. ..	10	4	2	2	2	..	8·6
11. Of Skin, etc.	6	2	..	2	1	1	2·0
12. Malformations	1	1	..	..	..	..	4·0
13. Debility from Premature Birth, etc.	21	21	..	..	..	..	28·8
14. Atrophy	27	18	..	1	8	..	23·6
15. Age	45	..	..	..	25	20	58·3
16. Sudden	11	9	..	1	1	..	16·2
17. Violence, Privation, etc. .	32	12	7	8	4	1	39·6
CAUSES NOT SPECIFIED.. ..	7	1	..	..	..	..	3·6

THE following are the number of Deaths from Small-pox, Measles, Scarlatina, Hooping-cough, Diarrhœa, and Typhus, in the several Districts of London, for the past Week :—

	Popula- tion.	Small- pox.	Measles.	Scar- latina	Hoop- ing- Cough.	Dia- rrhœa.	Ty- phus.
West.....	376,427	1	3	3	14	3	5
North	490,396	1	5	8	6	5	4
Central ..	393,256	..	5	3	9	1	4
East	485,522	..	9	6	13	5	5
South	616,635	2	4	8	16	3	6
Total..	2,362,236	4	26	28	58	17	24

MORTALITY NOTABILIA.—The total number of deaths registered in London, which in the previous week was 1156, was in the week that ended last Saturday 1195, of which 627 were deaths of males, and 568 those of females. Average of ten years, 1318. Hence it appears that 123 persons survived last week, whose names would have been inscribed on the registers, if the average rate of mortality had prevailed. The diseases classed under the general term “zymotic,” principally fatal to children, exhibit a considerably reduced rate of mortality. The decrease appears under small-pox and typhus (or common fever). The deaths from bronchitis rose last week to 164.

BIRTHS.—The births of 939 boys and 916 girls, 1855 children, were registered.

METEOROLOGY.—The mean height of the barometer in the week was 29·719 in. The highest reading in the week was 29·90 in. on Saturday.

DIETARIES.—The following table of dietaries and their nutritive values is taken from an excellent paper on the Economy of Food, read before the Society of Arts last week, by Dr. Letheby :—

	WEEKLY CONSUMPTION IN OUNCES.							DAILY DITTO.		
	Bread or Biscuit.	Meat.	Potatoes.	Meal, etc.	Milk.	Cheese.	Butter.	Car- boniferous	Nitro- genous.	Total solid nutriment.
Physiological	140	84	..	..	..	..	3·5	12·7	4·0	15·7
Prison punishment	112	..	..	..	..	..	..	8·2	1·4	9·6
E. County and Borough Gaols										
Under seven days	121	..	..	23	39·5	..	..	12·4	2·2	14·6
Not hard labour	172	7·8	3·2	22·8	15·4	3·5	..	15·7	3·1	18·8
Hard labour	163	14·6	63·4	27·2	41·6	1·5	..	18·2	3·5	21·7
Scotch Prisons.										
Under three days	112	..	..	28	..	..	..	11·2	1·9	13·1
Not hard labour	30	7·5	15·2	73	175	..	..	19·0	3·4	22·4
Hard labour	76	10	176	100	175	..	..	27·0	4·5	31·5
Irish Prisons.										
Under one month	56	..	192	70	70	..	..	19·5	2·9	22·4
Not hard labour	56	..	192	60	170	..	..	20·5	3·4	23·9
Hard labour	64	..	219	70·5	170	..	..	22·0	3·6	25·6
Military Prisons.										
Under 84 days	56	..	..	119	210	..	..	22·2	3·8	26·0
Over 11 days	56	..	..	168	210	..	..	27·8	4·7	32·5
Destitute debtors	156	16	52	22	21	..	..	16·3	3·1	19·4
Convict prisons	161	36	112	12	12·8	..	..	18·4	3·6	22·0
Unions (adults)	123	15	51	18	90	4·5	1	15·2	3·0	18·2
Unions (children)	90	14	32	..	105	..	3·5	11·1	2·3	15·1
Lunatic Asylums	114	23	68	13	14	7	1·3	13·2	4·0	17·2
Public Hospitals	93	52	56	14	7	..	3·2	12·1	3·5	15·6
Army.										
Crimea	112†	112	..	..	..	..	..	16·0	4·8	24·8
Home	168	84	112	..	..	..	..	19·4	4·8	24·2
Madras	112	112	56	4*	..	..	..	16·5	4·9	21·4
Bombay	140	112	56	56*	..	..	..	22·2	5·6	27·8
Field (India)	168	..	..	168*	..	..	..	30·7	3·8	34·5
Navy	112†	112	56	..	..	..	..	17·7	5·0	22·7
Navigator (Crimea)	140	140	..	28	..	..	..	17·8	6·2	23·0
Navigator (Home)	320	96	64	..	..	12	4	18·6	7·7	26·3
Berwickshire labourer .. .	122	..	..	224	224	..	..	37·1	7·0	44·1
Yorkshire labourer	280	126	28	..	210	..	49	42·2	8·8	51·0

In this Table only the most important articles of diet are mentioned, although the others, excepting beer, spirits, tea, and coffee, are calculated in the daily consumption. (*) are rations of rice, and (†) are of biscuit. Gruel is calculated at rate of 2 ozs. meal per pint.

ORIGINAL LECTURES.

LECTURE

ON

THE STRUCTURE AND PHYSIOLOGY OF THE OVARIA.

BEING ONE OF THE LUMLEIAN LECTURES READ BEFORE THE

Royal College of Physicians, April, 1856.

By ROBERT LEE, M.D., F.R.S.

(Continued from page 307.)

BUT De Graaf made another discovery, of equal or even of greater importance than that now described—the impregnated ovum in the horns of the uterus of the rabbit on so early a period as the third day, which he has delineated; and he has also given delineations of the impregnated ova which he found in the horns of the uterus from the third to the fourteenth day. The discovery of the corpus luteum, and the actual detection of ova in the horns of the uterus on the third day after impregnation, place De Graaf in the very first rank of anatomical discoverers.

The ova he found in the horns of the uterus were much smaller than the Graafian vesicles, and it seems altogether unaccountable, with such talents for minute research and logical powers of reasoning, that the idea did not occur to him, that these ova must have proceeded from the interior of the Graafian vesicles, and were not actually vesicles detached from the ovary and discharged. He perceived that the canal of the Fallopian tubes was not sufficiently large to allow entire vesicles to pass, but this difficulty was apparently got rid of by the fallacious argument, that if the os uteri dilated and allowed a child to pass at the full period, there was no reason why the Fallopian tube should not expand and permit the vesicle to do the same. He had seen ova retained in the Fallopian tube of the human subject, and death result from rupture of the coats and hæmorrhage, because they could not dilate like the os uteri, and yet he did not perceive that the argument employed was of no value.

De Graaf died at the age of 32, but whether before or after the storm of ridicule and abuse which immediately followed the publication of his work, I have not ascertained. Mauriceau, who was profoundly ignorant of the whole subject, but who was determined that women should not be deprived “de leurs testicules,” as he called them, and that they should not possess ovaria, (as some anatomists at the present time have determined that the uterus and heart shall have no nerves,) took a prominent part in this outcry against him and those who adopted his views, which was kept up nearly one hundred years, when the truth of his doctrines and integrity of his character were first fully vindicated by Mr. Cruikshank. The statements of De Graaf respecting the ova he had found in the horns of the uterus on the third day were contradicted by Malpighi, Hartman, Valisnieri, and Haller, who professed to have made numerous observations, but never succeeded in seeing ova in the Fallopian tubes and horns of the uterus, from which it was inferred that De Graaf had described and delineated objects which he had never seen, and which did not exist, and had thereby committed what might have justly been denominated a wilful scientific falsehood or forgery. Even Dr. William Hunter doubted his accuracy and honesty, but with that love of truth for which he was so distinguished through life, acceded readily to the proposal made to him by Mr. Cruikshank to repeat the experiments, and these led to the complete removal of that obloquy which had so long rested on the character of De Graaf as a scientific observer and truthful man.

“In the beginning of summer 1778, I was conversing with Dr. Hunter on this subject, and said I should like to repeat those experiments, now that Lectures are over, and that I have the summer to myself. ‘You shall make the experiments,’ said he, ‘and I shall be at the expense.’ Accordingly, he carried me to Chelsea, introduced me to a man who kept a rabbit-warren, and desired him to let me have as many rabbits as I pleased. I made the experiments, and shall now lay a copy of my journal then made before this Society” (the Royal). In the Philosophical Transactions for 1797, Mr. Cruikshank’s paper was published. It was entitled, “Experiments, in which

on the third day after impregnation the ova of rabbits were found in the Fallopian tubes, and on the fourth day after impregnation in the uterus itself, with the first appearances of the foetus.” The experiments were made in 1778, and the paper was not published till nineteen years after, when Dr. Hunter and Mr. John Hunter were both dead. Mr. Cruikshank saw the ova as described by De Graaf, and has delineated them of the same size and general appearance. By comparing their plates this will at once be seen.

Mr. Cruikshank was upon the very brink of the discovery of the unimpregnated mammiferous ovum. If he had taken a Graafian vesicle and examined its contents carefully with a common lens, or even with the naked eye, he could not have failed to discover this wonderful structure, out of which the whole complicated organization of the human frame is developed. But that the idea of an ovum being formed in the Graafian vesicle before impregnation had never entered his mind, may be inferred from his first general conclusion from his experiments—that “the ovum is formed in and comes out of the ovarium after conception. What Dr. William Hunter has said respecting the discovery of the circulation of the blood, appears not inapplicable to the discovery of the unimpregnated human ovum.” It is the more amazing that this discovery was left for Harvey, when we consider that he was 100 years after Vesalius, in which interval many great men had appeared, and anatomical schools had flourished in many different parts of Europe. And what is still more astonishing, Servetus first, and Columbus afterwards, both in the time of Vesalius, had clearly given the circulation of the blood through the lungs, which we may reckon at least three-quarters of the discovery; and Cæsalpinus, had many years before Harvey, published in three different works all that was wanting in Servetus to make the circulation quite complete. But Providence meant to reserve this honour for Harvey, and would not let men see what was before them or understand what they read.

After the publication of Mr. Cruikshank’s paper, forty-seven years elapsed before any other individual arose to take up the torch that was to lighten us to the discovery of the unimpregnated ovum in the human species, and in all mammiferous animals. From Cruikshank to Prevost and Dumas, in 1825, there was no further attempt made to investigate the subject, and then the unimpregnated ovum was first beheld within the interior of the Graafian vesicle, and its spherical form and magnitude described, and its diameter measured.

Prevost and Dumas, two experienced microscopical observers, published a Memoir in the “Annales des Sciences Naturelles,” Paris, 1828, entitled, “De la Génération dans les Mammifères, et des premiers Indices de Développement de l’Embryon;” in which they stated that they had seen small ova in the horns of the uterus of a bitch eight days after impregnation, similar to those observed and delineated by De Graaf and Cruikshank in the rabbit on the third day. That they saw the unimpregnated ovum twice within the interior of the Graafian vesicle, and that they were the first who described its form and measured its diameter, is placed beyond the possibility of doubt; and that they are justly entitled to the honour of having made this great discovery is proved by the following passage from the Memoir referred to: “Les ovules qu’on rencontre dans les cornes sont remarquables par leur petitesse. Ils ont en effet un ou deux millimètres de diamètre au plus, tandis que les vésicules de cet organe en possèdent un de sept ou huit millimètres, au moins. Ce sont deux choses qu’il ne faut pas confondre, et très probablement les vésicules ou les œufs de l’ovaire contiennent dans leur intérieur les petits ovules des cornes, qui s’y trouvent environnés d’un liquide destiné peut-être à faciliter leur arrivé dans l’utérus. Il est survenu deux fois, en ouvrant des vésicales très avancées de recontra dans leur intérieur un petit corps sphérique d’un millimètre de diamètre.”

In 1827 Professor Baer published a work, entitled, “De Ovi Mammalium et Hominis Genesi.” Although the names of Prevost and Dumas are mentioned in this Epistle, the preceding passage is not quoted, and the author lays a distinct claim to a discovery which had been made, and of which an account had been published two years before. “Contigit mihi etenim,” he says, “ut ovi mammalium et hominis primordia in ovario invenirem, quæ per sæculorum seriem tot et tantis laboribus frustra quesita sunt circa hanc rem natura scrutatores quam maxime dissentire inter homines constat.”

This work contains an account of the structure of the

Graafian vesicle, and of the unimpregnated ovum in man and various mammiferous animals. The ideal section of the Graafian vesicle and its contents places the whole subject in a clear light.

To obtain a view of the human unimpregnated ovum, it is only necessary to have recourse to the following simple proceeding:—Take the recent ovarium of a healthy woman, between the age of maturity and the period of life when the catamenia usually cease. Dissect out a Graafian vesicle with forceps and needle or fine scissors. Place the vesicle upon a small plate of glass, tear its coats open, and press out the contents. The ovum will then be seen with the naked eye, and still better with a lens magnifying six or twelve diameters. The granules in which it is imbedded being washed away with a drop or two of cold water, the ovum may be examined and clearly seen through the compound microscope.

The ovum, as described and delineated by Professor Baer, has since been examined by microscopical observers, and the following is the result of their discoveries:—Imbedded in the yolk of the ovum, on one side there is a nucleated cell, about one-sixth of the diameter of the ovum itself, which was discovered independently by Monsieur Corse, in France, in the ovum of the rabbit, and by Mr. Wharton Jones, in this country, in the ovum of man and other mammifera, which is homologous with the vesicle discovered by Purkinje in the cicatrized of the immature eggs of birds, and which exists in the ova of all other animals. This cell was named the germinal vesicle, and its nucleus, which was observed contemporaneously and independently by Mr. Wharton Jones in this country, and Professor Rudolph Wagner in Germany, was called the germinal spot. These discoveries were made and the names given before Schwann promulgated his cell theory,—in the language of that theory the germinal vesicle, with its nucleus, is a nucleated cell. The germinal vesicle of the mammiferous ovum was, I believe, first shown in London, 1837, at the Royal College of Surgeons, to Professor Owen and myself, by Mr. Wharton Jones, two years after I had presented his paper to the Royal Society, in which it was described and delineated, the paper having been transmitted to me for that purpose by the late lamented Professor John Burns, of Glasgow.

The discovery of the germinal vesicle of the ovum of man and the mammifera was one of the highest physiological importance. It was a necessary complement to the discovery of the ovum itself by Prevost and Dumas; inasmuch as by its means the true nature of that body, and its identities in structure with the ova of other animals, was cleared up, and Professor Baer's transcendental speculation disproved,—viz. that the body discovered by Prevost and Dumas, and more particularly described by him in the Graafian vesicle, was identical with the vesicle of Purkinje, of the ovum of oviparous animals. It was in accordance with this mistaken view, and not on account of its minute size, that Baer called the body ovulum.

The ovarian ovum of man and the mammifera, and that of birds and other ovipara, was thus shown to be identical in nature,—both equally to be composed of a germinal vesicle, a yolk, and yolk membrane.

In concluding this historical account of the discovery of the unimpregnated human ovum, it is impossible to avoid being struck with wonder at the manner in which it is formed and protected from injury by the membranes and fluid with which it is surrounded, and ready to escape when its existence as a living and intelligent and independent human being, with an immortal soul, is about to commence. The infinite wisdom of the Creator is miraculously displayed in the whole process of the formation of the ovum, its impregnation, its transit to the uterus, and its subsequent development. "Now, as all this proceeds with the most consummate foresight and intelligence," says Harvey, in reference to the efficient cause of generation, "the presence of the Deity therein is clearly proclaimed."

The language of the inspired writer, in which he celebrates the omnipotence of the Deity, and the wisdom displayed in the organization of the human frame is still more appropriate and sublime: "For thou hast possessed my reins: thou hast conceived me in my mother's womb. I will praise thee; for I am fearfully and wonderfully made: marvellous are thy works, and that my soul knoweth right well. My substance was not hid from thee when I was made in secret, and curiously wrought in the lowest parts of the earth. Thine eyes did see

my substance, yet being unperfect; and in thy book all my members were written, which in continuance were fashioned when as yet there was none of them. How precious also are thy thoughts unto me, O God! how great is the sum of them!"

ORIGINAL COMMUNICATIONS.

ARMY MEDICAL REPORTS.

EXTRACTS FROM A REPORT ON THE ORGANISATION OF THE RUSSIAN MEDICAL DEPARTMENT, AND THE SANITARY STATE OF THEIR CRIMEAN HOSPITALS.

The following extracts are taken from a Report by Dr. Mouat, Deputy Inspector-General, and Mr. Wyatt, of the Coldstream Guards, just printed by order of the House of Commons, and collected in a visit to the Russian camp on the north side, the field or camp hospitals on the Mackenzie Plateau, and the large general hospitals of Baktchiserai and Simpheropol, more particularly the latter, where, through the kindness of M. Reisky, the chief Medical officer of the Crimean army, the reporters had an opportunity of witnessing the remaining cases of the surgery of the war, and all the arrangements of a military hospital on a large scale:—

DIET OF THE TROOPS AND SICK.

"It was said that each family in Russia, upon the outbreak of war, undertook voluntarily to supply one cart, filled with grain, three horses, and a driver, also four oxen for food; and it was calculated that about one-half only ever reached the Crimea. This fact explains a circumstance of which we were in total ignorance during the war, viz., the absence of salt meat generally as an article of diet. It was reported to us, that plenty of fresh meat was always obtained for the troops during the war, and, with cabbage to make the national "potage aux choux," was always available for the use of the sick and wounded. As a necessary consequence, therefore, scurvy did not exist to any extent, and does not appear to have proved the same serious complication with them as it did with us during the sad and memorable winter of 1854-55."

CRIMEAN FEVER AND ITS CAUSES.

"The Russian Medical officers evidently consider remittent fevers to be the endemic of the Crimea, and this is the principal disease from which the Tatar inhabitants chiefly suffer, and likewise the Crimean and French intendants, and other *employés* in the service of the Russian nobility on the south coast. This natural tendency to the endemic of the climate appears to have been further aggravated by the system of underground hutting adopted in the Russian camp; the same system, in fact, in use with the Turks, and to a great extent by the Tatars, which, whatever advantages it may possess in affording shelter and protection against the extreme cold of a Crimean winter, is deficient in those sanitary conditions, dryness and ventilation, so essential to health. Baron Larrey, alluding to this subject upwards of fifty years since, stated that the system of underground hutting adopted by the Turks was productive of a malignant kind of fever. The same exciting cause appears to have operated in some degree in producing disease of an allied nature in the French and Sardinian armies during the late campaign in the Crimea; and it is impossible to observe the abodes of the native Tatars, without being led to the conviction, that the low form of intermittent fevers, from which they invariably suffer at certain periods of the year, must be in a great measure produced by the vast absorption of damp and moisture, combined with a thorough want of ventilation, which exist in a potent form in these earth-clad habitations."

HUTTING OF THE RUSSIANS.

"The huts constructed by the Russian army, of the materials found on the spot, were neither paved nor boarded, and were very dark; some of them were provided with a rude, clumsy kind of stove, more like an oven than anything else, and calculated rather to impede than assist ventilation. The hospital huts, which were made of the same materials as those used for the construction of barracks, contained a kind of elevated platform, running the whole length of the huts, which, covered with a wattle or hurdle, on which was placed a straw

mattress and pillow, running as a bed. These huts generally contained from twelve to twenty men or more, very closely packed, but were only occupied by such slight eases as could be conveniently treated in camp, all serious cases being removed to the fixed hospitals in the rear. The interior of these huts was tolerably clean and well kept, their chief imperfection being in their total want of ventilation and light; windows or open fire-places did not exist; the air, consequently, when the only door was closed, must have been rapidly vitiated, and must have favoured the generation of fever from the accumulation and condensation of noxious animal and terrestrial emanations, and hence one great exciting cause of diseases of an adynamic type."

LOSS OF THE RUSSIANS.

"We shall probably never arrive at their true loss: they gradually admitted to us, in conversation, to have lost upwards of 300,000 men during the siege."

RUSSIAN MEDICAL OFFICERS.

"The Russian medical officers, who appeared an intelligent and well educated body of gentlemen, though far too few in number for the duties required of them, were perfectly aware that some of the causes in operation were due to the necessities of war, which left them little or no option in occupying unhealthy parts, or unwholesome crowding. The encampments, as with us, were necessarily formed in the vicinity of rivers, or marshy ground frequently, or exposed elevations, recently cleared of timber and brushwood, well-known causes of malaria. Like ourselves, the Russian medical officers appear to have been subjected to unmerited odium, for what was truly beyond their reach, and we heard of a medical officer of high standing having been degraded in consequence of the alleged impurity of the quinine supplied to the army, with which he, of course, could have nothing to do. The medical officers of the Russian army were seldom consulted in the selection of sites for camps or the construction of the hutting; they were, however, called upon to bear the blame when disease broke out, and, in the emphatic language of one of them, the military authorities exclaimed, when disease and pestilence overtook them, "Messieurs, faites votre médecine."

RUSSIAN SANITARY COMMISSION.

"It appears that, independently of the voluntary union of the Russian medical staff into a body for the purposes of scientific discussion, the Government ordered the constitution of a hygienic debating society, for the purpose of inquiring into the exciting causes of the sickness and mortality then prevailing; and whenever this sanitary commission was at all agreed and unanimous upon any point, their suggestions, embodied in a report, were forwarded, and sometimes received attention from the authorities; the medical officers all agreed, that since the commencement of the present war, the Government had become infinitely more liberal as regards hospital supplies."

SANITARY CONDITION OF THE HOSPITALS.

"The sanitary condition of the Hospitals was better than might have been expected, considering the enormous pressure to which they have been subjected; the most objectionable and striking feature to a visitor accustomed to the ample accommodation of the English establishments, was an overcrowding, and want of separation of infectious diseases; for instance, we observed, both at Bakhtiseraï and Simpheropol, cholera, dysentery, and erysipelas, also typhoid fever in the same crowded wards. This might have been easily obviated, as we saw a large amount of open Hospital accommodation which, we were told, was a reserve in case of an epidemic, as a visitation of some kind or other was expected from the large accumulation of sick and wounded; indeed such an accumulation had already taken place at Odessa, where a large extension of malignant fever (accompanied by buboes in the groin and axilla), had occurred in the crowded Hospitals. The Russian Medical officer stated that on account of all communications being cut off by our blockading fleet, their losses during the extensive journeys by land carriage, which the sick and wounded were obliged to undertake, were out of all proportion to any preceding war. We found the prevailing type of diseases, in the Hospitals which we visited, to be fevers of a remittent type, with typhoid symptoms; but a most careful examination in many cases failed to detect maculæ, or any specific eruption. The cases, such as we

saw, were stated to be benefitted by quinine, iron, wine, and general stimulants; a few local complications required the aid of leeches; but purgatives, we were assured, had been very sparingly used."

ORGANIZATION OF THE RUSSIAN MEDICAL DEPARTMENT.

"There are two classes of Students who enter the Medical department of the Russian army—

"1st. Those who have been educated at the expense of the State, who are generally the sons or orphans of military officers.

"2nd. Those who have studied medicine at their own expense, at the different Universities of the Empire.

"The right of the first class (educated by Government) to serve in the army, for a certain period, is compulsory, from which they cannot retire until they have completed six years' servitude. After twenty-five years' service, every Medical officer is entitled to a retirement on the half-pay of his rank; but if he consents to serve for thirty years, he then obtains the entire pay of his rank on retirement; after thirty years' service no further inducement to serve exists.

After the first six years' service each Medical officer receives an increase of pay, and this continues after each succeeding five years.

"The pay varies from £40 a year to £120, which is the pay of the General Staff Doctor of an army, and the ranks vary from that of captain to general. The same military honours and rewards are equally distributed to the Medical as to the combatant officers, and they appear to have been liberally distributed to all grades. . . . One chief advantage of the Russian system is, that if the state of the service precludes the promotion of a Medical officer from a want of vacancies in the service of the department, his prospects as to pay and retirement still progressively advance, by the provision for increase of pay after every five years' successive service; and also increase of relative army rank for any special merit displayed; and as no kind of inducement for prolonged service exists after a special period, young and efficient men are always to be found occupying many of the posts of responsibility."

APOTHECARIES.

"In every regiment there is a dispenser, who has the rank of a non-commissioned officer. In every general hospital there is an apothecary, who depends, as regards his rank and pay, upon the size of the hospital."

CLASSES OF MILITARY HOSPITALS.

"All military hospitals are classified thus:—

Hospitals of the 1st class contain	150	sick or wounded.
" " 2nd " " "	300	"
" " 3rd " " "	600	"
" " 4th " " "	1200	"
" " 5th " " "	1800	"
" " 6th " " "	2500	"

"Simpheropol, during the late war, was estimated to be a fitting place for a military hospital of the sixth class."

RUSSIAN DRESSERS.

"The dressers who, in the Russian army, are denominated felchers, are young lads having the rank of serjeants, and are generally the sons or orphans of soldiers; sometimes they are from the "Maisons des Enfants Trouvés," at St. Petersburg. They are all educated subsequently at the expense of government, and taught what the French term, "la petite chirurgie;" their duties are, in fact, analogous to those performed by the Medical subordinates attached to European regiments in India, where they are placed in each regiment to assist in the minor duties of the Medical officers; they are, to a certain extent, responsible for the regularity and discipline of the sick in the absence of the Medical officer, and, in the Russian army, are said to be well-conducted, intelligent, and an efficient body of subordinates; in fact, the Medical officers with whom we conversed, both civil and military, acknowledged that without their assistance, it would have been impossible to perform the arduous duties which devolved upon them during the siege; they are under the orders of, and responsible to, the senior Medical officers. In each Russian regiment, which, as has been before stated, consists of four battalions of 1000 men, there are four felchers and one superior felcher, who had obtained his rank after the

recommendation of the Medical officer for special good conduct in the hospitals. In each Russian general hospital, the proportion of felchers is about one for every seventy-five sick."

HOSPITAL ATTENDANTS.

"Besides the felchers there are hospital attendants, or orderlies, allowed from the ranks in the proportion of one for every ten sick, and in special cases, extra or separate attendants are permitted, who, in a large hospital, are all under the control of a non-commissioned officer. The cooking for the hospitals appeared excellent, and well conducted by cooks, who are selected from the ranks, and then permanently attached to the hospitals."

AMBULANCE AND TRANSPORT OF THE ARMY.

"Each regiment and division had a certain proportion of sick-carriage allotted to them, which consisted of a heavy kind of boat-shaped waggon on four wheels, and without springs; these were furnished in the proportion of six to each battalion, and one small cart in addition for medicines. The wagons were calculated to carry four persons each: two inside, recumbent on straw, and two on the seat in front; drawn by three horses abreast. By these vehicles, the sick and wounded which were constantly moving between the towns in the interior of the Crimea, where fixed hospitals were established (such as Baktchiscrai, Simpheropol, and Perekop), as many as 500 every third day, were removed from Sebastopol."

STATE OF SIMPHEROPOL.

"The greatest number of sick and wounded ever in Simpheropol at one time was 13,400, and on that day the deaths were 94. The sick and wounded now there (May, 1856), amount to 6000; but there is hospital accommodation in the town for 15,000, the reserve tents never having been used. The daily deaths now average about 25; this includes the mortality from all causes in 40 private and public buildings used as military hospitals."

FEMALE NURSES.

"The Medical officers all spoke in high terms of the female nurses, who were all Sisters of Mercy, generally being widows of officers. These ladies, who voluntarily undertook the duties in the Crimea, were strictly under the orders of the Medical officers, and were of great assistance in superintending matters of detail connected with the diets, and care of the sick and wounded; their chief duties appeared to be in taking charge of the linen and superintending the issue of extras. One of them (on account of the paucity of Medical officers during the siege) was taught to administer chloroform, which she was said to have done with great dexterity and judgment. From what we saw and heard of these valuable women, with our previous knowledge of the attempt to introduce female nursing into our own military establishments in the Crimea and at Scutari, we are led to the conclusion irresistibly, that female nursing, as a general rule, can be only successfully practised from either the predominance of strong feelings of devotion or affection: founded on merely mercenary, or any other feelings, it is not only liable, but nearly certain to fail, if introduced into military hospitals; and such, we believe, will be the testimony of most persons of any experience, who have carefully attended to the subject during the late campaign."

SURGERY OF RUSSIAN ARMY DURING THE WAR.

"The brave defenders of Sebastopol appear to have had all the advantages of modern art and science placed at their disposal. M. Pirogoff, reputed one of the best surgeons in Russia, was sent from St. Petersburg, with others, to aid the military medical officers in their terrible and arduous duties; notwithstanding this, and the employment of foreigners, (Germans and Americans,) the medical officers, by their own account, appear to have been much overworked, and 140 are stated to have died at their posts in the Crimea. In round numbers, 80,000 men are officially reported to have been wounded during the siege, and upwards of 10,000 capital operations were performed. Of this number, nearly 3,000 were amputations, and the following is an approximation of the results.

"Of the amputations of the upper extremity, about one half recovered; of the leg and foot, the same results were obtained; of the thigh, at the lower and middle-third, about one-third recovered; of the amputations higher than the middle-third

the success was so rare, that they were seldom attempted. Amputations at the hip-joint appear to have been attempted three times by M. Pirogoff; one died in two hours, one in six hours, and the third survived two days. These results apply to primary operations; about two-thirds of all the secondary amputations died. Union by the first intention is never attempted by the Russian surgeons, on account of the impossibility of obtaining so desirable a result in crowded hospitals; they find that whenever attempted under such circumstances, it generally fails; pyæmia, abscess, and phlegmonous inflammation, being the almost invariable results, with increased mortality. The accumulation of wounded in the fixed hospitals was great, and in obedience to well-established laws, whenever such is the case, the mortality must necessarily be great. One-fourth of the fatal cases after operation during this campaign were the result of pyæmia. Erysipelas and phlegmonous inflammation appear to have been common; but no great amount of hospital gangrene, and very little tetanus; both these affections were generally fatal. The circular operation appears to have been preferred to the flap in all amputations, and we saw some good stumps, both in the upper and lower extremity. We saw one case of double amputation below the knee, and three or four successful excisions of the elbow-joint. Conservative surgery appears to have been largely and successfully practised. In an hospital, the medical officer in charge, stated, as the result of twenty resections, fifteen recoveries (of the upper extremity). Amputation at the knee-joint, and excision of this articulation, as far as we could ascertain, have not been attempted; nor excision of any portion of the neck or shaft of the femur. M. Pirogoff, we were informed, had modified his operation at the ankle, to that of Syme. In wounds of the head, the trephine was rarely resorted to, except for the evacuation of matter. Secondary hæmorrhage was rare, and uncomplicated wounds of the veins and arteries seldom came under treatment. Wounds of the head and chest are stated to have been singularly fatal. In 200 cases of wounds, penetrating the cavity of the chest, admitted into the hospitals at Simpheropol, only three recovered; they do not bleed in such cases, but administer digitalis instead. We were unable to obtain any definite observation on the subject of the treatment of compound fractures, particularly the thigh. The only apparatus we saw for treating fractures, was a kind of splint, to suit the form of the limb, made of gummed cotton canvas."

FURTHER REMARKS ON AMYLENE.

By JOHN SNOW, M.D.

In my former paper, which appeared on the 17th and 24th of January, I merely stated, with regard to the preparation of amylene, that it was made by distilling fusel oil with chloride of zinc; and I referred to the original paper of M. Balard, its discoverer, for further particulars (a). As amylene is beginning to be somewhat extensively used, I think it is desirable that I should quote the process of its preparation more in detail. The crude fusel oil must be submitted to a careful distillation with a thermometer in the retort. It begins to boil at a comparatively low temperature, but that portion only is to be retained which comes over from 130° to 140° Centigrade. Caustic potash is added to decompose the æthanthe ether which the distilled liquid contains, and it is then redistilled, and that portion which boils steadily at 132° Cent. is collected as pure amylic alcohol. Amylene can be obtained from amylic alcohol in the same manner that olefiant gas, or ethylene, can be made from common alcohol, namely, by heating it with dishydrating agents, as sulphuric, phosphoric, fluoboric and fluosilic acids, and chloride of zinc; but most conveniently with the last substance, which is the one that M. Balard employed. The product which is obtained when amylic alcohol and chloride of zinc are distilled together contains at least three distinct hydro-carbons, amylene, par-amylene, and metamylenes; and the amylene which is the most volatile is separated from the others by successive distillations.

It is probable that the amylene hitherto produced is not entirely free from other hydro-carbons of a similar composition, for its boiling-point is not quite steady. M. Balard gives 39° Cent. (102° Fahr.) as its boiling-point; and I have found

(a) *Annales de Chimie et de Physique*, t. lxxvii. 1844.

this to be the average boiling-point of the amylene I have obtained from Mr. Bullock, but it usually begins to boil freely at about 35° Cent.; and as it evaporates the boiling-point gradually rises to about 43° Cent. There are some specimens which begin to boil at a still lower temperature than 35° Cent., and are put in a state of ebullition by the warmth of the hand, owing to gaseous hydro-carbons, which they hold in a state of solution. The greatest part of the odour of amylene is contained in that portion which distils over below 39° Cent. It is probable that the amylene, as hitherto prepared, contains a little butylene, for butylic alcohol is one of the constituents of crude fusel oil, and it is not likely that amylic alcohol can be obtained entirely free from it by fractional distillation, the only process at present known for its separation.

The fact of amylene not being an absolutely pure body in a chemical sense is no objection to its use, since it can be obtained uniform in all its properties and in its physiological effects. The numerous specimens of amylene with which Mr. Bullock has supplied me, have been uniform in their physical properties, and in their effects. Soon after my former paper was published some amylene was made by M. Berthé, of Paris, which was shown to M. Balard, the discoverer of the substance, and met with his approval. A portion of this was administered by Dr. Debout, to some patients operated on by M. Aran, in the Hospital Saint Antoine, and produced exactly the effects which I had described(a). Dr. Debout also examined some amylene made by Mr. Bullock, in London, and performed some experiments on animals with it, and he found it to possess the same properties as that prepared in Paris.(b)

Mr. Bullock has succeeded in preparing amylene during the last few weeks with much less odour than before, and thus the strongest objection to this agent is already in a great measure removed. It is probable that the nearer the amylene approaches to a state of absolute purity, the less will be its odour. A substance was supplied as amylene to one of the large hospitals in London, which produced no effect when inhaled, and I found that it was a brownish liquid, having no resemblance to amylene. At another place the amylene failed to produce an effect, and I was informed that it was adulterated with twice its volume of spirits of wine. This kind of adulteration can easily be detected by shaking a portion of the amylene with water in a graduated tube or minim measure, when the spirit mixes with the water and the amylene rises to the surface. When the amylene is pure it is not diminished in volume by shaking with water; it is perfectly clear and colourless, and it evaporates quickly and entirely when dropped on the hand. Although it has a very distinct odour, somewhat resembling naphtha, it is almost without taste, and it is entirely without pungency, furnishing in this last respect a marked contrast to both chloroform and ether. It produces no irritation or effect of any kind on the sound skin, even when confined, and prevented from evaporating.

Amylene is inflammable, and in pouring it out by candle-light the same care is required as in dealing with sulphuric ether. A slight explosion may be obtained by applying a light to a mixture of a small quantity of its vapour with a large amount of air.

The paramylene, which is produced at the same time as amylene, does not possess sufficient volatility to be inhaled with a view to induce insensibility. It has been tried in Paris, and failed. It boils at 160° Cent. Metamylene, which does not boil till raised to 300° Cent., is still further out of the question. There are, however, other carbo-hydrogens produced in the process of making amylene, which boil at a temperature between the boiling point of amylene and that of paramylene, and, so far as their physical properties are concerned, I thought they might be eligible and convenient for inhalation; but, on making some experiments on guinea-pigs and mice, with a specimen boiling from 85° to 100° Cent., with which Mr. Bullock was good enough to furnish me, I found that the physiological effects were altogether undesirable. It produced illness, debility, and difficulty of breathing, but neither unconsciousness nor anæsthesia.

I have administered amylene in 110 additional cases since

(a) See Bulletin Général de Thérapeutique, 15 Février, p. 127. Since the above passage was written Dr. Debout has kindly sent me, through Mr. De Meric, a specimen of the amylene prepared by M. Berthé. I found it to be just like that prepared in London, and I used it in an operation by Mr. Fergusson, in King's College Hospital, with the usual result.

(b) *Ibid.* 15 Mars, p. 215 and 223.

January 10, when my former paper was written; and this extended experience has confirmed the observations which I made on the earlier cases. The great case with which it can be breathed, owing to its entire want of pungency, is a decided advantage which it possesses over both ether and chloroform. It rarely causes the least cough, unless the vapour be inhaled too strong at the very beginning; and insensibility can always be induced in as short a time as is desirable, namely, in from three to four minutes in the adult, and about two minutes in young children. It is not desirable to cause insensibility in a shorter time than this with any agent. If narcotism is induced too quickly, the symptoms are not uniform or in regular order, owing, no doubt, to the circumstance that the narcotic vapour is not equally distributed through the blood, which must convey it to the nervous centres. Insensibility can, indeed, be generally induced with chloroform in the time above-mentioned, but there are many cases in which there is considerable delay at the commencement of inhalation, owing to the pungency of the vapour, especially in nervous and in sensitive patients, and in persons with irritability of the air-passages from chronic bronchitis, phthisis, or any other cause.

Further experience has entirely confirmed me in the conclusion that anæsthesia, or the absence of common sensibility, is obtained by the use of amylene with much less coma or stupor than occurs in the use of chloroform or ether. Indeed the greater number of operations under amylene have been performed whilst the patient was apparently awake, although not really conscious of surrounding objects. I am quite satisfied, from experiments which I have performed on animals, that amylene is capable of causing a state of deep coma, and that very quickly, by increasing the quantity of vapour in the inspired air; and I have in two or three instances observed this condition for half a minute or so in a patient; but since pain can be prevented by amylene without deep coma, one abstains from inducing it. The usual absence of coma in the employment of amylene cannot be looked on otherwise than as an advantage. It must conduce to the safety of the agent. The reason why no accident is known to have happened from chloroform in the practice of midwifery, when superintended by a Medical man, is, no doubt, due to the circumstance that it is only requisite to induce a slight effect, in comparison with the effect required in surgical operations. The best indication that the patient will quietly bear an operation under chloroform, is the more or less complete absence of sensibility of the ciliary edge of the eyelid; but during the inhalation of amylene the patient is often entirely regardless of the surgeon's knife, whilst the edges of the eyelids retain their full sensibility, and the slightest touch causes strong winking. In operations on the eye, however, and in all other cases where great steadiness on the part of the patient is required, I have thought it best to continue the amylene till the sensibility of the margin of the eyelids was almost abolished; and to effect this it has usually been requisite to carry the influence of the vapour as far as the beginning of the third degree of narcotism, or that condition in which there is no longer voluntary motion of the eyes, or any other part, and in which the eyelids are usually closed, and the pupils inclined upwards. But even in these cases the patient has usually reverted to the second degree of narcotism before the end of the operation, and has shown signs of ideas by the voluntary motion of the eyes and eyelids, or in some cases by speaking. In several cases, however, the sensibility of the eyelid has been removed in the second degree of narcotism, and important operations have been commenced before the patient was "off," to use an expression familiar on these occasions. One instance of this kind was the operation of lithotomy by Mr. Fergusson on the 14th instant, in a young man, aged 17, in King's College Hospital. The sound was first introduced, and the stone being detected, the assistants were requested to tie the patient up; and finding his limbs somewhat rigid, they requested me to give him some more vapour; if I had been using chloroform, I should have done so without any request, in order to cause relaxation, but I allowed the effect of the amylene to partially subside, and in less than a minute the bandages could be easily applied. I then proceeded to give a little more amylene, but soon found that the margin of the eyelids was insensible, so the operation was performed whilst he was calmly looking about, as if awake, but he showed no sign of pain, and knew nothing of the operation. I never saw a capital operation performed on

the adult under the influence of chloroform or ether, whilst the patient was in this condition; but I once administered chloroform in St. George's Hospital to a child of three or four years old, which was cut for stone whilst lying calmly with its eyes open, and holding a toy in its hand, all the time of the operation, without letting it fall. In tenotomy, and many other minor operations, I have merely continued the amylene till an altered expression of countenance indicated that the patient was no longer conscious of his situation, or of surrounding objects, and the operations have always been completed without the patient's knowledge, although awaking often within a minute afterwards.

There is a tendency to laugh during the inhalation of amylene much more frequently than during the inhalation of chloroform. It occurs just after the patient has lost his consciousness, but it is soon subdued by the increasing effect of the vapour. The colour of the countenance is generally heightened more or less during the whole period of the inhalation. The expression generally remains calm and cheerful, but in a few instances there is a singular, and even unpleasant aspect of the countenance for a short time, arising apparently from a brief spasmodic action of the muscles. I have only met with strong mental excitement in three patients, all females; it subsided in half a minute in one case on leaving off the vapour, and was as quickly subdued in the others by continuing it. The excitement did not return in the first case, when the inhalation was resumed.

The pulse is almost always accelerated during the early part of the inhalation, and the breathing at the same time quickened. In many of the early cases in which I administered amylene the pupil was dilated for a short time, and I consider that this arose from giving the vapour rather stronger than is desirable. I have lately given the vapour more gently, and for several weeks I have not observed the pupils to be dilated; they have remained, as nearly as I could tell, of the natural size, and also sensible to light, in the cases where I have made an observation on that point.

There has been some amount of rigidity and spasm in a considerable number of cases in which I have employed amylene, but not to the extent which occurs sometimes in the employment of chloroform. The rigidity, moreover, is of a somewhat different kind, and occurs in patients in whom we should not expect it from chloroform. In the spasm and rigidity from the latter agent the head is more commonly bent forwards, or turned to one side, although occasionally it is thrown back; but under amylene the latter is the usual position it assumes when rigidity occurs, constituting a brief opisthotonus. The rigidity under the influence of chloroform is usually accompanied with struggling, while in that caused by amylene the patient is generally quieter. The persons in whom rigidity and struggling are most violent from the effects of chloroform are lean, muscular men, who work at hard labour, or follow athletic sports, such as hunting, and especially boating; while those who lead a sedentary life, or are reduced by illness, seldom exhibit these phenomena. Women and children seldom exhibit any rigidity under chloroform, and fat persons least of all. Old people do sometimes, especially if thin. Under the use of amylene, on the other hand, I have most frequently met with some amount of rigidity in children and young persons, while many robust men, in whom it would be almost certain to occur under chloroform, have not shown any signs of it. The cause of this probably is, that the operation has generally been performed without carrying the narcotism beyond the second degree, while rigidity does not take place till the third degree is attained. In every case where rigidity and struggling have occurred in the employment of chloroform, however violent these symptoms might be, I have continued the vapour gently and steadily till they were subdued, either by removing the tendency to these symptoms, or by carrying the narcotism to the fourth degree, which is accompanied by relaxation of the voluntary muscular system, and usually with some tendency to stertor. When the struggling from chloroform is once subdued it rarely recurs during the operation, although there are a few patients, especially among hard drinkers, who have a tendency to struggle whenever the effect of the chloroform diminishes. In the use of amylene, on the contrary, I have not attempted to subdue the spasm by continuing the inhalation, but have, with the exception of a case of dislocation, to be mentioned further on, withdrawn the vapour when the rigidity appeared, and the operation has either been performed

at once, or else, if it was of a nature that the spasm would interfere with, I have waited a short time, and exhibited a little more vapour very gently. I have every reason to conclude from experiments which I have made on animals, that the spasm caused by amylene could always be subdued by increasing the strength of the vapour; but I have not followed this plan, as it appears to be unnecessary. In fact, I have reason to believe that in some of the earlier cases in which I administered amylene, a certain amount of spasm, which might have been avoided, was induced by carrying the effects of the vapour a little further than was necessary, or by giving it a little more quickly than was desirable.

I stated in my former paper, that I had not met with sickness in any of the twenty-one cases in which I had exhibited amylene. I afterwards learnt, however, that vomiting had occurred in one of these cases two or three hours after the operation. In the subsequent 110 cases I have only been able to hear of sickness in seven instances, although I have been able to make inquiry respecting all but a few of the patients. What is remarkable is, that I have not seen vomiting take place in any instance in which I have administered amylene, although in the last hundred cases in which I have given chloroform twenty-two of the patients, or more than one-fifth, vomited before I left the room. This occurred, notwithstanding that directions had been given in the greater number of instances not to take a meal before the operation. Certainly, these directions were given in a greater proportion of the chloroform cases than in those where amylene had to be inhaled. I administered amylene on January 30 to a lady about 25, while Mr. Bowman operated for strabismus, and there was no vomiting or sickness, either at the time of the operation or afterwards; but the same patient had undergone a similar operation a week previously, when chloroform was administered, and on that occasion vomiting commenced before the operation was finished, and recurred every quarter of an hour, with violent retching, for twelve hours. The sickness caused by chloroform usually begins at the time of the operation, or within a quarter of an hour afterwards; the most usual time for it being, as consciousness is returning; and if there is no sickness after chloroform till some hours have elapsed, there has generally been a dose of opium in the mean time, or some other cause, which would account for it. The few instances of sickness which have happened after amylene, however, have chiefly occurred at the end of a few hours, although there was no intervening cause for it. The sickness has not been severe in any case; it was generally a single attack of vomiting, after which no feeling of sickness remained.

(To be continued.)

OBSERVATIONS ON THE

MEDICAL HISTORY OF THE EARLY KINGS OF ENGLAND.

By G. CHAPLIN CHILD, M.D.

(Continued from page 212.)

RICHARD CŒUR DE LION, 1189—1199.

HOLINSHED says that Richard was "tall of stature and well-proportioned, with hair betwixt red and yellow." Succeeding to the throne at the age of 32, he spent the ten years that intervened before his death in restless military excitement, or in the gloom and humiliation of captivity among rancorous enemies. Ardent in the cause of the Crusades, and jealous of the military glory of his country, he exposed himself recklessly, in the East, to all the chances of disease; and although he had the good fortune to escape the plague when thousands were stricken down by it round about him, he nevertheless appears to have suffered long and severely from fever.

Richard left England to join the Crusades in 1190. On his way out he resided for some time at Salernum; the "schola" being then in its zenith. Subsequently "he fell sick at Rhodes" and was detained there several days, but the nature of his illness is not mentioned.

Hoveden relates that, shortly after the arrival of Richard at Acre in 1191, both he and the French king were attacked by a disease called Arnaldia, in the course of which they lost

all their hair, and were brought almost to the point of death, (laborantes fere usque ad mortem.) Commentators have been much puzzled in endeavouring to ascertain what the nature of this disease really was, for no particulars are given respecting it by contemporary historians. Ducange suggests that it might have been Alopecia; but the baldness was probably nothing more than a sign or effect of the disease, and its severity proves that there must have been something of importance besides the mere loss of hair. Be that as it may, the historian adds that "God had pity, so that they both recovered from their sickness, and became stronger and more hearty than ever in the service of God."

In this same year we are informed that Richard was much weakened by intermittent fever. Nevertheless he continued to superintend the works of the besiegers, being carried about the camp in a litter. The plague was raging at this time, but Richard escaped.

In 1192, exposure and fatigue again brought on fever, which greatly undermined the king's strength. An armistice was concluded subsequently; and as soon as his health permitted, Richard set off on his journey homewards, as his presence was much required in England.

While in the Holy Land, Richard made many enemies, among whom none was more virulent than Leopold, Duke of Austria. After landing at Aquileja on the Adriatic, the king proceeded to make the best of his way across Europe, but he hardly got as far as Carinthia before he perceived how hated he was in Germany. Pezzl, in his History of Vienna, says, "Richard disguised himself as a peasant, and in this manner skulked through the country as far as Vienna, where he concealed himself in a wretched house in what is now the suburb Erdberg," but which was then a swampy country district well suited for hiding. Here he was arrested by order of the Duke, as he was in the act of placing a fowl upon the spit. He lay in the prison of Dürnstein until 1193, and was then sent to Worms and afterwards to Mayence. At the beginning of 1194 he was ransomed, and soon after escaped into England.

In 1199 we find King Richard laying siege to the Castle of Chalus, bent on chastising his vassal the Vicomte de Limoges, who naturally enough demurred about surrendering some treasure that had been found in his territory. The king, in reconnoitring the castle, "to espy the feebleness thereof," suddenly heard the ill-omened twang of a cross-bow, and that he might avoid the missile, "ducked" his royal head, (regium caput inclinavit—Gervasius.) According to the same authority, "the archer standing on the ramparts of the castle, praying to God for success, shot the bolt at random." But be that as it may, to use the words of Holinshed, who has faithfully copied the chroniclers of the time, "the king was stricken in the left arm, or (as some will) in the shoulder, where it joined to the neck, with a quarrel envenomed, as is to be supposed by the sequel. Being thus wounded he got to his horse, and rode home again to his lodging, where he caused the wound to be searched and bound up, and, as a man nothing dismayed therewith, continued the siege."

In the course of eleven or twelve days the castle was taken, and "in the mean season the king had committed the care of his wound to a surgeon attached to the corps of Merchades, (a leader of mercenaries,) who taking in hand to pluck out the quarrel, drew forth only the shaft at the first, and left the iron still within; and afterwards going about most unskilfully to get forth the head of the said quarrel, he used such incisions and so mangled the king's arm where he could cut it, that the king himself despaired of all help and longer life, affirming flatly to such as stood about him, that he could not long continue by reason of his butcherlie handling."

Mathew Paris, copying from that valuable historian Roger de Wendover, gives nearly the same account, but with some additional particulars. He says the assertion that the arrow was "poisoned" rested on mere report, and that the king made so little of his wound (pro nihilo reputavit) that he actively continued the siege almost up to the time of his death. "Vulnus autem, male interim custoditum, intumescere incipiens, et nigredo quædam tumori permixta, locum vulneris circumquaque inficiens, Regem intolerabiliter torquebat." Then the king perceiving his danger, turned to his religious duties, pardoned his enemies, and made his testament. On the eleventh day, as is usually affirmed, "tumore ad cor subito proveniente, spiritum exhalavit."

At the period when this event occurred—1199—cross-

bows had not been long used in Europe, where they were introduced by the returning Crusaders. They were deemed such fatal and cruel weapons that their use was forbidden by the Second Lateran Council in 1139, under the penalty of anathema, "as hateful to God, and unfit to be employed among Christians." They were introduced, nevertheless, by Richard I., and his death was by many considered as a judgment upon his impiety. The bolt, or quarrel (quadratum) was armed with four broadly conical points, so as to be somewhat square-headed, and calculated to contuse as much as to penetrate. The bow was of steel, and so stiff that the string required to be drawn by a machine; hence we may judge of the force with which the bolt was projected. Crossbows, which might then have been in actual use, are preserved in the Museum of Antiquities at Rouen; but drawings of them may be seen in the Pictorial History of England, or Grosse's Military Antiquities. There is no good ground for believing that the arrow was poisoned; it was only a rumour at the time, which seems to have been suggested "by the sequel," or by the dark appearance (nigredo) which the wound subsequently presented. This blackness, it is hardly necessary to observe, is more naturally accounted for by the contusion inflicted by the quarell, or by the ecchymosis, the "butcherlie handling," the scetio venarum et nervorum (Knyghton) which afterwards ensued; or by gangrene and sloughing.

The cause of King Richard's death may, therefore, with great probability, be ascribed to gangrene or sloughing, following a contused wound of the arm. The wound originally appears to have been slight, but it was aggravated by bad management. I ought, perhaps, to mention another report at the time, to the effect that the wound proved fatal in consequence of Richard's setting at nought the advice of his physicians, who "interdixerunt ei omnem uxoris amplexum, tactum etiam atque visum."

How little soever we might have expected it from Richard's previous character, the monkish chroniclers tell us that his deathbed was edifying. Not only did he perform his religious duties with piety, as Bromton declares, but he carried his self-imposed penitential tortures to the point of ordering himself to be tied up by the feet and flogged. Bromton likewise assures us that he died, not like a lion, but "velut agnus mitissimus et pœnitens gloriosus."

His testament was a remarkable one, illustrating the singular custom then prevalent of a sick man willing away the different parts of his body as if they were so many chattels. Some parts, it was understood, honoured, other parts degraded and punished the recipient; and we question if a more curious legacy was ever devised than that which fell to the lot of the inhabitants of Poitou, to whom Richard left his bowels, or rather "stercora," to be buried "there, as in a place naturallie unthankful, and not worthy to receive any of the more honourable parts of his bodie." Of these "more honourable parts," he left his body to be buried at his father's feet at Fontevrault, in expiation of his unfilial conduct, and his heart to be enshrined by the canons of Rouen, "propter dilectionem."

"His herte invyneible to Roan he sent full mete,
For their great truth and steadfast great constaunee."

Hardyng Chron.

The heart itself, Gervasius tells us, was "grossitudine prestans." That heart, which when living, passed through so many dangers, was destined even after death to undergo strange vicissitudes. First came an escape, as during the long interval of delay that elapsed between Richard's death and the enshrinement, the cathedral was destroyed by fire; after which the heart was safely deposited in the choir of the new building. Next came the despoiling of the costly chässe of all its riches to help to make up the ransom of Louis the Holy, who lay a prisoner among the Saracens. About the beginning of the last century, while some alterations were being made in the choir, the kernel of the shrine or box containing the heart, together with the accompanying effigy, were seen and figured by Montfaucon, in his "Monuments de la Monarchie Française;" and after that, these relics again disappeared, and were lost during the turbulence and antiquarian indifferentism of the last century. But in the year 1838, the learning and sagacity of a distinguished Norman antiquarian—M. Deville—led him to make search for the missing heart, which, after much skilfully directed perseverance, was discovered in a leaden box in a concealed cavity in the wall of the cathedral, near that part of the choir

where it had been originally deposited. Many circumstances proved that this was the heart in question, but a legend in the rude characters of the period on a silver plate removed every doubt—"Hic jacet cor Ricardi regis Anglorum." M. Deville described the heart "as withered to the semblance of a faded leaf." (a)

Many objects still remain in existence to help us to realise this picturesque chapter of English history. The ruins of the old castle of the Count of Limoges still look down on the town of Chaluz, in Poitou; and a little stone in the valley under the castle is pointed out as marking the spot where king Richard stood, "unwarily to espy the feebleness thereof," when he received his fatal wound. Fontevault and the choir of Rouen cathedral bring us to the last resting-place of Richard, and others of our Norman kings. In the Museum of Antiquities in the same town may be observed, in a little preparation-box, a quantity of what appeared to me not unlike the scrapings of a wall, and it is with a curious feeling one reads on the ticket, with seal attached to guarantee its authenticity, "Poussière du cœur de Richard Cœur de Lion, que j'ai découvert le 31 Juillet, 1838, sous le pavé de la cathédrale de Rouen, et fragments de l'enveloppe,—Deville."

EXPERIMENTS ON THE ACTION OF PEPSIN.

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THOSE who have employed pepsin in the treatment of dyspepsia will probably be disposed to admit that it possesses a considerable therapeutic value. Into this question I do not now propose to enter; but, as it is likely that the more extended use of the article, provided that we can secure its being properly prepared, will establish its claim to a permanent place in our Materia Medica, it may not be uninteresting to relate a few experiments that I have recently made with pepsin. The experiments were made with specimens of Boudault's pepsin (b), of Trommsdorff's pepsin, and of Oberdörffer's (c) dried pig's stomach. Boudault's pepsin (poudre nutritive) is acid to the taste, and to litmus, owing to the lactic acid it contains; it is a stone-grey powder, consisting mainly of starch and *débris* of epithelium, as shown respectively by the iodine test and the microscope. Trommsdorff's pepsin is also a stone-coloured powder, caking and gritty to the touch, strongly acid to the taste and to litmus paper, and very hygroscopic; under the microscope the whole appeared composed of starch granules of various sizes, which gave a blue reaction with iodine. On addition of water the granules swelled, became ovoid, and showed faint concentric lines, with here and there a radiating fissure.

The dried scrapings of the pig's stomach also presented a stone colour, but of rather a more reddish hue; the substance was pulverulent and soft, acid to test paper, and consisting of epithelium and *débris* of animal tissue; not materially altered by the addition of acetic acid, and containing a few ovoid particles, which were blued by iodine.

Of each of these I weighed out two specimens of 4 grains each, and submitted cubic pieces of hard-boiled white of egg, of 20 grains each, in half an ounce of distilled water, to their action. To one specimen of each one drop of strong hydrochloric acid was added, and the whole series was exposed to a temperature of 100° Fahr. The glasses were left for above twenty-four hours, and the following is a summary of the effects produced:—

The albumen treated with—

	Loss.
1. Boudault's pepsin, weighed over 16 grs..	nearly 4 grs.
2. Do. do. with hydrochloric acid, weighed under 10 grs.	above 10 grs.
3. Trommsdorff's pepsin, weighed over 18 grs.	„ 20 grs.
4. Do. do. with hydrochloric acid, weighed over 12 grs.	„ 8 grs.
5. Pig's stomach, weighed over 20 grs.	„
6. Do. weighed 15 grs.	5 grs.

(a) Archæologia, vol. xxix. Paper by Mr. Albert Way.

(b) Obtained from Messrs. Squires', the Queen's Chemists.

(c) These two specimens were kindly supplied to me by Messrs. Hilgenberg and Schacht, of Houndsditch.

In the case of 2 and 4 the action was very marked, the edges of the albumen were rendered extensively clear and transparent. Nos. 1 and 3 looked as if they had scarcely been affected; No. 6 was slightly digested, but much less than Nos. 2 and 4. The albumen in Nos. 3 and 5 looked as if it had undergone no change, and it was manifest that No. 5 had even absorbed water, and had thus increased in weight. The liquid was in each case tested for albumen; feeble indications of its presence were afforded by the water of Nos. 2, 3, 4, 5 and 6.

About a fortnight after the last series of experiments I repeated them, with nearly the same results. The same quantities of white of egg and pepsin were used, two drops of hydrochloric acid were added to one specimen of each kind, and the whole was exposed for some hours to a temperature of 110° F., and the glasses shaken from time to time. At the termination of the experiment, the albumen in—

1. Boudault's pepsin, weighed 15 grains	. 5 grains loss.
2. Do. do. with acid	„ 12 „ . . 8 „
3. Trommsdorff	„ 17½ „ . . 2½ „
4. Ditto, with acid	„ 17 „ . . 3 „
5. Pig's stomach	„ 21 „ . . 1 grain gained
6. Do. do. with acid	„ 8 „ . . 12 grains loss.

It is stated in my notes that the liquid of Nos. 1, 2, and 4, gave feeble indications of the presence of albumen. The albumen in Nos. 2 and 6 had become translucent to a great extent, while the albumen in the other glasses remained opaque. The discrepancy between the two serials is, that in the second the action of the pig's stomach with the acid was so much greater than Trommsdorff's pepsin, or even than Boudault's. The two sets of experiments agree in demonstrating that in all instances the solvent power of the preparation was much promoted by the addition of the hydrochloric acid; and that imperfect pepsin (as in No. 5 in each set) not only does not promote, but actually retards, digestion. We must not, therefore, allow our dyspeptic patients, on the mere strength of the pepsin we prescribe, to take a larger quantity of food in the first instance than we should otherwise order, but make certain of the peptic power of the agent in the first instance, or we may aggravate instead of relieving his complaint. It is evident also that Boudault's is a powerful and trustworthy agent.

In submitting the above memoranda, I would only add, that the conclusions I have arrived at in relation to the therapeutic value of pepsin, corroborate those put forward by Drs. Corvisart and Ballard, and that I regard pepsin as an agent which we may in many diseases of malnutrition prescribe with great benefit to our patients.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

HOSPITAL NOTES.

CASES OF SOLID TUMOURS CONNECTED WITH THE SACRUM AND SPINAL THECA.

We noticed some weeks ago a very peculiar case, now under the care of Mr. Husband in the York County Hospital, in which a large, ulcerated and fungating tumour over the sacrum of a boy, appeared to grow from the interior of the sacro-spinal canal. (See *Medical Times and Gazette* for January 3rd, 1857, page 9). The *écraseur* had been applied, and several of the larger outgrowths from the tumour removed. Mr. Husband writes us (March 21), that since our report the case has rapidly improved; that the sulphate of zinc has been used as an escharotic to those parts not accessible to the *écraseur*, and that there seems at present no disposition to renewed growth. It will be borne in mind that the features of most interest in this case were the co-existence of a congenital solid tumour over the sacrum, with deficiency of the laminae of that bone, but without any spinal symptoms; and, secondly, the inclination to fungate and grow which this tumour had manifested. A case recently operated on by Mr. Athol Johnson at the Hospital for Sick Children, bears a close similarity to it, excepting in regard to the latter circumstance. In it, Mr. Johnson removed from the sacral region of an infant two years old, a firm lobulated fibro-fatty tumour,

which had been noticed very soon after birth, and had no doubt been congenital. The child had no spinal symptoms, and before the operation no suspicion existed of the tumour being in any way connected with the spinal canal or its contents. In the dissection, however, the sacral laminae were found deficient, and the pedicle of the tumour passed into the opening thus left and adhered most closely to the dura-matral sheath. After its removal the pulsations of the spinal fluid were very clearly seen. The child recovered well, and no symptoms of irritation of the spinal nerves followed. We have in these two cases examples of a condition of things of which, as far as we are aware, no other instances are on record. In the last the tumour was increasing rather rapidly, and had it been left to itself it is quite possible that, in the course of years, ulceration might have taken place, and the condition in which Mr. Husband's patient now is have been repeated. There is no evidence in Mr. Husband's case that the tumour is malignant; indeed, the evidence seems against such a supposition, although the general aspect of its ulceration, etc., was at one time very suspicious.

AMPUTATIONS AT THE HIP-JOINT.

On Saturday last, at St. Bartholomew's, Mr. Stanley performed an amputation at the hip-joint. The patient was a thin, spare man of middle age, in whose right femur a malignant growth of nearly a year's duration existed. Three years ago, he had had a fracture of the bone, but it united well, and for two years he got about with a good limb. The operation was rendered one of much difficulty by the size of the tumour, which projected upwards so as greatly to limit the incisions. Mr. Stanley began by cutting the anterior flap from without, inwards, and having divided the vessels, a ligature was placed upon the artery before the limb was removed. The blood lost was not in great quantity, and when the man was removed to bed he was in a hopeful condition. In the afternoon, however, a sudden hæmorrhage took place, and he died in about ten minutes. We shall give the details of the case next week.

CURE OF VESICO-VAGINAL FISTULA.

There is now in the Samaritan Hospital a very interesting case under the care of Dr. Snow Beck, in which a vesico-vaginal fistula of twenty-three years' standing has been completely cured. Dr. Beck adopted a novel plan, namely, by destroying the callous edges of the fistula with the galvanic cautery, removing the slough by scraping a few days afterwards, and bringing the raw edges together by hare-lip pins and sutures. The woman was carefully examined last Tuesday by Mr. Paget and Mr. Spencer Wells, and the union appeared to be perfect, six days after removal of the pins. We shall give a fuller account of this case in a future number.

CONGENITAL RECTO-VAGINAL FISTULA.

Mr. Spencer Wells has a patient in the Samaritan Hospital, 14 years of age, upon whom he proposes to operate for the relief of this congenital defect. The rectum and vagina have a common opening, and Mr. Wells intends to make a posterior opening at the site of the normal anus, in which he will keep a tube until cicatrization is complete, after which the perineum will be formed by a plastic operation.

ANCHYLOSIS OF THE HIP AND KNEE IN THE SAME LIMB.

Mr. Paget has now under his care in Abenethy ward a case of ankylosis after disease of the hip-joint, in which the position assumed by the limb is one of very rare peculiarity and awkwardness. When the man stands up his left lower extremity, which is the affected one, projects slightly outwards, at a right angle from the trunk. Both knee and hip are, if not ankylosed, fixed with the very slightest possible range of motion, and the limb cannot be made to alter its position. The parts about the hip have for long been soundly healed, and all thickening of tissues has disappeared. The great trochanter can be distinctly felt in apposition with the ischiatic tuberosity, the limb having been twisted over and then fixed. When in bed the man contrives, by bending his spine so as to turn the pelvis to the right, to bring the limb just under cover of the bedclothes; but in walking, when the sound limb is brought to the ground and the pelvis straightened, the diseased limb sticks out in the most ludicrous and unsightly manner. We believe that Mr. Paget contemplates

shortly to make an attempt under chloroform to dislodge the bone from its present position, and to bring it down again, which, if it succeed, will obtain for the man a very useful limb, as the disease of the knee is fast subsiding. The history of the case is peculiar in some respects. J. R., aged 24, is florid, of nearly average height and stoutness, with fair hair, and strumous appearance. He is the son of one of the Bishop of Oxford's gardeners, was born and brought up in the country, being well fed and cared for. At the age of twelve he had an abscess in the thigh, which within a fortnight of its commencement required to be opened, and discharged most profusely. From this time for about a year he was very ill, and was confined wholly to his bed. Abscesses in various parts formed about the hips, in the back, on the left shoulder, and in the right hand. From the latter place some diseased bone exfoliated. Gradually he got better of these, and subsequently disease formed in and about the left knee. From the commencement of the disease to the present time the left lower extremity has never been put to the ground. He has never had any symptoms of phthisis, nor is any of his family known to have suffered from much disease. On seeing the man in bed it is easy to guess at the way in which the strange deformity has been produced. During the acute stage of the disease the boy must have been in the habit of lying with the pelvis very much distorted, and the limb thrown outwards. In that position it might easily escape the observation of the Surgeon that when the pelvis was brought down, the femur would project outwards at a right angle. The case affords a good lesson in favour of the use of the leg splint in hip-joint disease, and in illustration of the importance of keeping the limb in the best position with regard to the stiffening, which may be expected as the disease subsides.

EXCISIONS OF THE HEAD OF THE FEMUR.

Four cases in which excision of the head of the femur has been recently done in the London Hospitals are all promising to give good results. The boy formerly mentioned, under the care of Mr. Hancock, in the Charing Cross Hospital, has quite recovered; and the one under Mr. Erichsen's care in University College is doing well. The third, a boy of about five years, under Mr. Ure's care in St. Mary's, is so well as to be able to get out of bed, though the limb operated upon is, of course, not yet useful. We might fairly say of this and of Mr. Erichsen's, that although in both much swelling about the hip still exists, it has not been found practicable to keep the limbs in good position, yet the relief to the irritation of the system, etc., by the operation, has been most marked. The patients are both of them emaciated little boys, and great difficulty has been encountered in so applying the straight splint as to keep the limb in a line with the body. Indeed this difficulty of managing the limb afterwards constitutes one of the greatest drawbacks to the operation as compared with other excisions. Were it possible to fix the part as completely as in the case of the knee-joint, and at the same time allow the patient a little freedom to change position, etc., we have no doubt that resections of the head of the femur would do much better, and find much greater favour with the Profession. The fourth case is one in which Mr. Stanley operated about a fortnight ago at St. Bartholomew's. The patient is a lad of 13, whose health was rapidly failing under advanced disease of the articulation. Since the resection he has done very well. The limb is in excellent position, and although the discharge is very profuse, yet he seems to be improving in strength.

TREATMENT OF TINEA TARSI.

Cases in which that most troublesome disease tinea tarsi is associated with some other skin disease, not unfrequently present themselves at the Hospital for Cutaneous Diseases. Mr. Startin insists much upon the employment of constitutional measures as well as local ones. The following is the prescription under which a very inveterate case occurring in a young man who had previously submitted to much local treatment without any permanent good effect, derived great benefit. *R* Solutionis hydrargyr. co. ʒj; tinct. lavendulæ co. ʒss.; ammoniæ hydroch. ʒj.; aq. pur. Oj.; ft. mist.: cujus capt. coch. j. min. ter die. The edges of the lids, and some patches of eczema about the face and arms, to be smeared nightly with an ointment containing the acetate of lead and mercurials. The case was too far advanced to be susceptible of a complete cure, the lower lids already being much wasted; but under

this plan they became free from scab and from inflammation, and the hairs, which had been stunted, again grew in a tolerable row. (a)

THE PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

STATISTICAL REPORT OF THE PRINCIPAL OPERATIONS PERFORMED DURING THE LAST SIX MONTHS OF 1856.

(Concluded from page 315.)

THE subjoined Report comprises the following Hospitals:—Addenbrooke's (Cambridge), the Birmingham (Queen's), the Berks Royal (Reading), the Cheltenham General, the Cumberland (Carlisle), the Derby General, the Dorset County (Dorchester), the Dundee Royal Infirmary, the Durham County, the Gloucester, the Hitchin General, the Hull, the Leeds, the Leicester General, the Liverpool Royal, the Liverpool Southern and Toxteth, the Margate Sea-bathing Infirmary, the Nottingham General, the Sheffield General, the North Staffordshire (Etruria), the South Staffordshire (Wolverhampton), the Staffordshire General (Stafford), the Sussex County (Brighton), the West Norfolk and Lynn (Lynn), and the York County Hospital.

OPERATIONS FOR STRICTURE OF THE URETHRA.

Case 1.—The Gloucester: Mr. Wilton.—A man, aged 31, had been for four years the subject of a tight stricture of the urethra. He was admitted after a four days' attack of retention, during which it had been found impracticable to pass a catheter. The usual means having failed to procure relief, Mr. Wilton cut down on the stricture in the perinæum, divided it, and introduced a flexible catheter. The man recovered well, and when he left the Hospital the urethra was of good size.

Case 2.—The Liverpool Royal: Mr. E. Bickersteth.—A man, aged 26, for two years the subject of stricture. He had suffered several severe attacks of retention, and nothing larger than No. 1 or No. 2 could generally be introduced. Once or twice dilatation had been practised up to No. 4 or 5, but sudden recontraction would again occur. Under these circumstances it was determined to perform perineal section. The operation was done after Mr. Syme's method, the stricture being cut from behind forwards on a grooved staff. A No. 8 silver catheter was retained forty-eight hours. The patient recovered perfectly, and when discharged was free from all symptoms.

Case 3.—The Liverpool Royal: Mr. Stubbs.—A boy, aged 12, had his perinæum severely contused in a crush by a canal boat against the bank. The urethra was ruptured, and sloughing followed. On his admission into the Hospital some time afterwards there were several fistulæ in the perinæum, through which the urine escaped, none of it passing by the natural channel. The urethra was impermeable. The operation consisted in passing down a small grooved staff up to the stricture, and then cutting down on the end of this, and dissecting on through the strictured tract. A catheter was afterwards passed by the penis into the bladder, and retained for forty-eight hours. The case did well, and three months afterwards the wound was healed, excepting a mere pin-hole aperture, and all the fistulæ had closed. No. 7 was easily admitted.

Case 4.—The Leeds: Mr. Hey.—A man, aged 62, had suffered from a tight stricture more than twenty years. Dilatation with bougies had been repeatedly practised, but failed to give any lasting relief. Perineal section on a grooved staff was performed. A day or two afterwards secondary hæmorrhage occurred, and after this the wound became sloughy from infiltration of urine. He rallied well from these complications, but eventually sank and died about seven weeks after the operation. Both kidneys were found small, firm, and puckered.

(a) Sol. hydr. co. The following is the formula for this solution: R Hydr. bichlorid. 3ij; acidi arseniosi 3ss; hydr. hydrochl. 3ij; aquæ pur. ad 3vij; coque et solve. Dosis ℥ij. ad ℥x. That of the lead and mercury ointment is R plumbi acet. pulv. 3ij; zinci oxydi 3ij; hydrochl. 3j; ung. hydr. nitr. 3ij; adipis recentis, 3xij; olei palmæ, 3x; misce. Vide the "Pharmacopœia of the Hospital for Skin Diseases."

PUNCTURE OF THE BLADDER.

Case 1.—The Liverpool Royal: Mr. Stubbs.—A thin, spare man, aged 50, a coachman, was admitted on account of retention of urine. He had suffered from stricture, the result of a bruise of the perinæum on the pommel of the saddle, for thirty years. He had not been under much treatment, but had often suffered severely from retention. A No. 1 catheter was with difficulty passed, and some urine having been drawn off, and opium administered, the man became more comfortable. The following day the catheter could not be passed, and the bladder was distended and tense, rising nearly to the umbilicus. The symptoms not having been relieved by treatment, it was determined to puncture by the rectum; but this was found impracticable on examination, as the finger could not be passed above the prostate. Puncture above the pubes was accordingly performed, and a very large quantity of urine drawn off. The patient was much relieved, and the canula was retained. He seemed at first likely to do well, but subsequently typhoid symptoms came on, and death ensued on the eleventh day. No autopsy was permitted.

EXCISION OF THE UPPER JAW.

Case 1.—The Liverpool Royal: Mr. E. Bickersteth.—A healthy married woman, aged 23, was admitted on account of a solid hard growth under the left cheek, which caused general enlargement of that side of the face. It was of seven years' growth, and had increased painlessly. In the mouth the left side of the palate was felt to be pushed downwards. It had all the features of an osseous tumour in the maxilla, and the entire bone was accordingly removed by the usual operation. On extricating the bone profuse hæmorrhage occurred from the tearing of a large vessel (probably the internal maxillary), but it was arrested by compressing the carotid until the artery was tied. The patient had afterwards an attack of erysipelas, but in spite of it she recovered well. The tumour when sawn across proved to be a bony growth from the antrum, the cavity of the latter being filled, with the exception of a small space capable of holding a pea.

EXCISION OF PARTS OF THE LOWER JAW.

Case 1.—Addenbrooke's, Cambridge: Mr. Humphrey.—A healthy-looking young man, aged 28, was admitted in November, with a large tumour growing from the lower jaw, and resembling an epulis. It was of twelve months' duration, and involved nearly the entire depth of the bone, from the first incuspid to the second molar. An incision was carried from the angle of the mouth downwards and backwards, nearly to the angle of the jaw. The saw was next used, and the tumour, with the whole of the diseased tract of bone, excepting a mere rim at its lower border, was removed. The part of bone left appeared to be healthy. The wound quickly healed, and the man was discharged in three weeks. Under the microscope cells resembling those of cancer were found.

Case 2.—The Liverpool Royal: Mr. E. Bickersteth.—A healthy-looking man, aged 25, admitted with a tumour growing from the lower jaw, of nine weeks' duration. It had during that period been twice removed by a surgeon prior to his application at the Infirmary, but on each occasion had rapidly grown again. During the few days he was under observation prior to the operation it increased greatly in size. The horizontal ramus of the jaw was excised up to within a short distance of the symphysis. The patient recovered well.

Case 3.—The Liverpool Royal: Mr. E. Bickersteth.—A spare man, aged 62, for six months the subject of a firm tumour in the left side of the lower jaw. It was about the size of a walnut, and painful. Excision of the portion of jaw from which it grew was performed, and he recovered well. At the time of report the disease seemed to be reappearing.

OPERATIONS FOR NÆVUS.

In thirteen cases operations for nævus, either by ligature or excision, have been performed, and in all without ill consequences.

EXCISION OF THE TESTIS.

Number of cases, 5; recovered, 2; under treatment, 2; died, 1.

Case 1.—The York: Mr. Hey.—A man, aged 37, the subject of constitutional syphilis. The right testis was enlarged to the size of a goose egg, hard and heavy, and adherent to the scrotum. The cord was somewhat thickened. The testis, after removal, showed complete disorganization by the deposit of a curdy, strumous-like material, the centre of

which had softened. The man recovered well, but about a month later he was readmitted with a subacute inflammation of the other gland. It subsided under treatment, but left some enlargement.

Case 2.—The West Norfolk: Mr. Kendall.—A man, aged 34, was admitted on September 13, the left testis being enlarged to the size of a hen's egg. The disease had existed six months, and the gland was irregular in shape and very firm. There had been much pain in it. The testis was removed, and showed under the microscope "a fibrous structure, containing compound cells." Recovery.

Case 3.—The West Norfolk: Mr. Kendall.—A labourer, aged 56, who had enjoyed good health until about six months ago, when his right testis began to enlarge, and his strength suffered. The same testicle had been enlarged eight years before, but did not then cause him any trouble. On admission the testis was as large as two fists, tense, elastic, of irregular shape, and very painful. On June 11 excision was performed. Erysipelas of the scrotum followed, and extended to the groin and thigh. Much sloughing of the skin in the groin resulted. He was recovering from this when, about three weeks after the operation, a fungous bleeding growth appeared from the extremity of the cord. This rapidly enlarged, and profuse bleedings followed. He sank from exhaustion on September 17, three months after the operation.

Case 4.—The Leicester: Mr. Macaulay.—A healthy man, aged 47. The enlargement of the testis had commenced about five years before, and on admission its size was that of a child's head. About four ounces of serum were drawn off from the tunica vaginalis on the day prior to the operation. The mass was excised in the usual way. The cord was tied *en masse* by a strong silk ligature. Before the man's removal from the operating table this ligature slipped, and it became necessary to lay open the inguinal canal, in order to secure the bleeding vessels. Considerable oozing from the bottom of the wound continued for about five hours after the operation. The disease consisted of cystic sarcoma.

Case 5.—The West Norfolk: Mr. Kendall.—A man, aged 34, had suffered for several years from an enlargement of the right testis. It was the size of a goose egg, not painful to the touch, but liable to severe shooting pains, which also affected the lumbar region. Treatment having failed to effect its diminution, it was excised. The man recovered well.

Case 6.—The Queen's, Birmingham: Mr. Langston Parker.—A labourer, aged 44, was admitted on account of enlargement of the left testicle, which he attributed to its having been squeezed in a "lark," eight months before. The skin was adherent and ulcerated. The increase in size had been gradual. The gland and the diseased skin were removed, and the former presented a specimen of chronic or strumous orchitis. The cord was tied *en masse* by a double ligature passed through it. Very little bleeding occurred at the time, but an hour afterwards it came on profusely. Ice astringents, etc., were applied without avail, and finally the hæmorrhage was arrested by a large Signorini's tourniquet applied so as to compress the cord on the pubes. This was quite effectual. The man afterwards did well.

Case 7.—The Leeds: Mr. Smith.—A strumous man, aged 21. Excision of the testis, on account of well-characterized cystic sarcoma. Recovered well, and left the hospital in much improved health.

REMOVAL OF EXOSTOSIS.

A healthy girl, aged 15, under the care of Mr. E. Bickersteth, in the Liverpool Royal Infirmary. The exostosis affected the outer side of the lower part of the femur, and had increased slowly and without pain during several years. On removal it was partially covered by an adventitious bursa.

TRACHEOTOMY.

Case 1.—Addenbrooke's, Cambridge: Mr. Humphrey.—A boy, aged 3, was admitted on August 10, suffering from much difficulty of breathing, supposed to arise from his having got "a haw" into his windpipe. Four hours after admission alarming dyspnoea came on, and on applying the stethoscope over the trachea a clicking sound was heard. Tracheotomy was now resorted to, but before the trachea could be opened the child was to all appearance dead, both pulse and respiration having ceased. The trachea was quickly opened, and the tube introduced, through which artificial respiration was kept up for some minutes. The child having rallied, the canula was removed, and the wound in the trachea being held open

by blunt hooks the haw was expelled with force during a powerful expiration. As he could not breathe comfortably without it, the tube was re-introduced afterwards, and allowed to remain for three days. On August 23 the wound had all but healed, and the child being quite well was allowed to leave the Hospital.

Case 2.—The Queen's, Birmingham: Mr. West (H.S.).—A boy, aged 2½, was admitted on October 8, in a state of asphyxia, with the statement that he had swallowed a plum-stone a quarter of an hour previously. Tracheotomy was immediately performed, and a bougie was passed through the wound upwards into the pharynx. No stone was found, but the child's breathing was relieved by the operation. Liability to spasmodic cough continued for a fortnight afterwards, and then gradually ceased. The wound healed, and the child regained its health; careful stethoscopic examination failing to detect anything wrong in the chest, excepting, perhaps, a very slight impairment of respiration in the lower part of the right lung. The motions had been carefully watched, but the stone was not found.

PLASTIC OPERATIONS.

Cases 1, 2 and 3.—In these, operations for double hare-lip were successfully performed. *Case 4 to 13.*—In these, operations for single hare-lip were successfully performed. *Cases 14 to 20.*—In these, operations for the relief of deformity, consequent on contractions of the cicatrices, of burns were performed. In most of these more or less of benefit, and in some great benefit was obtained. *Case 21.*—The Liverpool Royal: Mr. Long.—A healthy man, aged 41; the subject of a cleft palate. The usual operation was performed, and good union resulted. *Case 22.*—The Liverpool Royal: Mr. Long.—A healthy lad, aged 15, the subject of a cleft which involved the whole soft and part of the hard palate. Staphoraphy. Successful result.

REMOVAL OF THE EYEBALL.

This operation has been performed in six cases. In all the patients recovered well. In three it was on account of a lost eye being a source of sympathetic irritation to the sound one; and in the other three, on account of malignant disease. In one of the latter, occurring in a seaman, aged 53, the disease was melanosis in the cellular tissue behind the globe, and the whole contents of the orbit had to be removed.

IODINE INJECTION IN OVARIAN DROPSY.

Injection of ovarian cysts with iodine has been performed in two cases, both in the Leeds Infirmary. In one, the patient recovered, and in the other death resulted. For full details of the cases see *Medical Times and Gazette* for February, pages 111 and 138.

NOTES AND QUERIES.

He that questioneth much shall learn much.—Bacon.

No. 197.—SWEATING SICKNESS.

Where is the best account to be found of the Ephemera Britannica, or Sweating Sickness, which visited England at different times between 1483 and 1551?

Edinburgh, March, 1857.

ÆSCULAPIUS.

No. 198.—DR. JOHN FAUCEBY.

Where can any notices be obtained of Dr. John Fauceby, who was physician to Henry the 6th?

Malta, March 10.

A. G.

No. 192.—HAMPSTEAD WELLS.

There was a time when the Hampstead Mineral Spring was in great repute. John Soane, who wrote a book on "Hampstead Wells" lived there in 1734. Is the spring still in existence? If so, in what part of Hampstead? What is the composition of the water?

University College, March 30.

SMOKIANUS.

No. 200.—REPRODUCTION OF HAIR AND TEETH IN OLD AGE.

Can any of your readers refer me to any recorded cases or observations bearing on this curious subject? I know a gentleman, aged 73, whose hair is now dark and tolerably thick, although ten years ago it was silvery white and very

thin. I have heard my father speak of a distant relation who cut four molar teeth at a very advanced age,—I believe eighty or thereabouts.

Canterbury, March 30.

CLERICUS.

No. 201.—HISTORY OF BLISTERS.

When and by whom were blisters first introduced into Medical practice? Freind says about 1576. I have read somewhere that Malpighi disinherited his heirs for allowing him to be blistered while he was in a state of insensibility. Perhaps some of your readers could furnish more information on this subject.

London, March, 1857.

W. M.

No. 202.—IODIDE OF POTASSIUM IN ASTHMA.

In the last volume of the *Medical Times and Gazette*, p. 579, an extract is given from a Boston journal, to the effect that iodide of potassium had proved very useful in cases of asthma. In the last number of the *Indian Annals of Medical Science*, Dr. Mackay, writing from Coimbatore, says the iodide has been much used in asthma in that part of India, and has given perfect and lasting relief. It seemed to produce a copious exudation of mucus. I should like to know if it has been used in this country, and with what results, as a remedy for asthma.

Hull, March 28, 1857.

A PHYSICIAN.

No 203.—FEES.

It seems to have been thought something unprecedented that Dubois should have received some £1700 for his attendance on the Empress of the French during her confinement, as mentioned some time ago in the *Medical Times and Gazette*. Yet on turning over the pages of Wadd more remarkable instances of large fees will be found.

Dimsdale, for his inoculation of the Empress of Russia and her son, was made a Baron of the Empire, with a present of £12,000, and a pension of £500 per annum.

Dr. Willis, for his successful attendance on George the Third, was rewarded by £1500 per annum for twenty years, and £650 per annum to his son for life. The other Physicians had 30 guineas each visit to Windsor, and 10 guineas each visit to Kew.

In 1737 the Physicians who attended Queen Caroline had 500 guineas, and the Surgeons 300 guineas each.

These are curious contrasts with the pension granted by Edward the Third, in 1345, to his Apothecary, Coursus de Gungeland, of *sixpence a day*, and *a shilling a day*, and *eight marks a year* to his Surgeon Richard Wye. In Whitaker's Craven, among the expenses of the Earl of Cumberland, in the 17th year of Henry the Eighth, we have, "Item, to a Physician at Westminster for seying my Lord's water, iv.d."

Three faces wears the Doctor; when first sought
An Angel's,—and a God's the cure half wrought:
But when that cure complete he seeks his fee,
The Devil looks less terrible than he.

Pall Mall, March 28, 1856.

CORDUS.

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MIRZA RIZA and MIRZA MUSSIN, two young Persians attached to Feroukh Khan's suite, and who were admitted as Physicians at Teheran, have been permitted to attend the lectures in the School of Medicine of Paris. This favour is the more valuable to them, as the practice of dissection is forbidden in Persia.

MILITIA MEDICAL SOCIETY.—A meeting of this Society was held at Birmingham on Saturday, the 28th instant, which was numerously attended, although many members were kept away by the general elections. The annual meeting will take place at Oxford in July next, of which due notice will be given to the members.

Medical Times & Gazette.

SATURDAY, APRIL 4.

SALE OF DISEASED MEAT IN LONDON.

In the year 1854, the Imperial and Central Society of Veterinary Medicine of France proposed for reply a series of important questions on the "Characters of Diseased Animal Food." The questions were answered by only one essayist, M. Soumille, of Avignon, but his essay was unusually pointed and able. The queries elicited replies regarding the possibility of detecting by examination of butcher's meat, Whether the animal was or was not healthy at the time of being slaughtered? Whether an inspection of meat will show that, from its exposure to the atmosphere or other causes, it has become unfit for consumption? How, from inspection of an animal, entire or divided, traces of special diseases, such as peripneumonia, phthisis, rot, measles, or dropsy, may be recognised? Whether such meat ought to be consumed, confiscated, or destroyed? And whether there are any positive signs by which it may be determined from what animal any portion of butcher's meat has been taken?

To the first four of these inquiries M. Soumille directed most attention. He gave portions of various diseased meats to animals, by way of experiment, with results but little injurious. He did not oppose strongly the use of measly pork, but recommended that the flesh of all animals that had died of phthisis and pneumonia, as also of animals whose leanness was coincident with old age or disease, should be prohibited; and he proscribed, though assured of its harmlessness, the meat of animals that have been over-fatigued before being slaughtered.

On the Continent inquiries of this nature have been abundant, but in this country hardly any attention has been paid to them until within these last three or four years. Yet it is clear that if in any country such labours are called for, in England the demand is most urgent. Statistics on the amount of animal food consumed in London alone show that, in the year 1853, the total sale of such food included 483,388 oxen, 2,141,393 sheep, 192,976 calves, and 159,052 pigs. This is known, but if we ask, amongst these animals what was the amount of healthy, what of diseased food? no one can pretend to reply. The question was not raised at that time.

But now, fortunately for the progress of sanitary principles, we have no longer to deplore the silence arising from apathy, the suppression of truth attendant on selfish cowardice, or the blindness incident upon an universal ignorance. The New Medical Association of Health Officers, established soon after the enforcement of Sir Benjamin Hall's New Act, made it one of their first duties to inquire into the quality of the animal food sold in our thoroughfares and although the members of the Association in forming their report were too hasty in their deliberations to bring out such a document as could carry any great scientific weight, they did good service in setting an example which admitted of being followed and improved upon.

Within the last few days the public appetite for horrors has been again sharpened, or rather unsharpened, by the publication of a sturdy unflinching letter to the Home Secretary from the pen of Mr. Gamgee. While ambitious, would-be-at-any-price M. P.'s have been looking out for rotten boroughs, Mr. Gamgee has been inspecting the cattle-market, in eager pursuit after the rotten portions of John Bull's food. He has not looked very long, it is true, but keenly enough for the time; and the existing evil which he has thus dragged

into the light, is multiple. He describes what he has seen; horridly disease-stricken beasts, set out, barely living, amongst healthy ones in the market for public sale. Disgustingly diseased haunches of dead flesh, hung up in the shambles for immediate consumption. Veal for sausage manufacture, which had never had the happiness to be born, which had died with the maternal beef, and had been honoured by the skilful performance of the Cæsarian section. Milk carried about from door to door for the 7 o'clock coffee, which had been pathologically secreted by a typhoid gland;—and so on, tale upon tale, till the long and bitter cry for ipecacuanha is everywhere, and the vegetarian disciple stands on his head in his excess of exultation.

Did we intend here to enter the lists with Mr. Gamgee, we could add abundant personal testimony to his disclosures. For some time past we have found the slaughter-house a convenient museum for the study both of physiology and pathology; and when our public labours in these departments have had their quietus, it will be time to mount the sanitary moral horse, and make a desperate charge in the name of our queen of health and beauty, the divine Hygeia. Meantime it falls to us more to moralize on the politics of the question before us, and to discuss how the evils complained of may be remedied.

It is evidently uppermost in Mr. Gamgee's mind that the state is to be charged with the duty of putting down at once, by stringent laws, the traffic in diseased food. Like many other enthusiastic men, teeming with energy, and feeling what he would do were he in place and power, he tries to touch up the Home Secretary with his own crusading zeal, and endeavours to infuse the political dogmas of the continent of Europe into this island. The Home Secretary will mark, learn, and inwardly digest—not the diseased beef, but the information concerning it—and having so far proceeded, will be content with being more specially select for the future in the choice of his butcher.

Such determination on the part of this important minister is the one which all sensible men, with means, will follow, and the ministerial point will thus in time be carried with applause. Much more than this can hardly be looked for. If a law is to be passed to prevent the sale of bad meat among the poor, the restriction must extend to cats also; for, if none but high-priced joints are sold for man, and all low-priced ones go professedly to the feline race, there will certainly be a feline famine, and the sausage man and small class butcher will begin to thrive under a new, less honourable, but not less profitable, title. There is, in fact, no law of the suppression kind that cannot be evaded in England; the man who dares not sell a prohibited paper sells a straw, and gives the paper; quacks sell poison—who can stop them? A neighbour of ours is taking an ounce of laudanum a day, and is dying from it as sure as the sun rises. Some thousands per year suffer infinitely greater evils from bad gin than from bad meat; shall the Home Secretary stop gin and laudanum? The thing is hopeless. Among excellent would-do-good enthusiasts, too little is considered regarding the political bases on which the constitution of this country rests, and too little respect is paid to the intelligence and common-sense of the people. Englishmen only want to be informed to be reformed. The most that the Government could do, in reference to this meat question, would be to enlarge on the very plan which Mr. Gamgee has pursued. It could, and should, appoint a scientific board, which should not only inform the people of existing evils, and how to detect and avoid them; but, also, expose publicly dishonest dealers of every class. It should lighten the burden of taxation on the poor, and enable them to go into the best market for their purchases, and it might prohibit private slaughter-houses by Act of Par-

liament, and put public slaughter-houses under competent supervision.

The scientific studies arising out of the facts now so prominently brought forward, lead into another, but not less important, field of labour. There seems to be no reasonable doubt that some forms of parasitic disease are directly introduced into the human body by the consumption of diseased animal food. But what of other forms of disease? Does the cooking of diseased meats render them innocuous? Can contagious diseases, such as typhus, be thus virtually swallowed? Here are great questions which should be at once discussed, and the answer to which should precede all legislation. There is grand work in this direction for any man or any body of men. Surely the Epidemiological Society might now happily exert its influence, and summon its many able and zealous friends to such investigations, with honour to itself and advantage to the community.

THE WEEK.

A return has been made to Parliament relating to Medical Museums in the United Kingdom. It contains some interesting information, from which we extract the following:—“The library of the Royal College of Physicians, London, contains 13,000 volumes. The museum of John Hunter, at the Royal College of Surgeons, contains 10,503 specimens; the library of the College contains between 40,000 and 50,000 volumes. The museum of the University of Durham contains 2547 specimens, the library 900 volumes. The Hunterian Museum, in the University of Glasgow, contains 3735 catalogued specimens. In King's College, and in Marischal College, Aberdeen, there is no museum, and no special Medical library. In the Royal College of Physicians of Edinburgh, there is a library containing 10,000 volumes, and a museum containing 2740 specimens. The College of Surgeons of Edinburgh has a museum of 6356 specimens. The Faculty of Physicians and Surgeons of Glasgow has a library of 10,000 volumes. The Royal College of Surgeons, Ireland, has a museum of 5016 specimens, and a library of 12,742 volumes. The museum of Queen's College, Cork, contains 4375 specimens, and a library of 1001 volumes. The Queen's College, Galway, has a museum of 1807 specimens. The University of London has neither Medical library nor museum. The museum of the University of Edinburgh holds the first position in regard to specimens for illustrating military pathology.

The trial of Alfred Matcham, whose case was reported in our number of the 13th of September last, came off last Friday at Bury St. Edmunds, ending in a verdict of acquittal. Very little that was new or curious transpired, and all that was either new or curious may be found in the charge of the learned Chief Baron. This most worthy judge seems to be afflicted with the curse of the present day, a superficial knowledge of many things, and he could not resist the opportunity of enunciating a precept and an opinion. The precept related to a question of Medical ethics, the opinion to a physiological fact. It was his pleasure thus to determine the proper course of conduct, under the following circumstances, of a surgeon who is sworn, on his admission as a member of the Profession to maintain by all means its honour and dignity. A fellow of the College of Surgeons is called to see a moribund woman some four days after she had been instrumentally delivered of a seven months' child by a man-midwife, who is known to be otherwise practising illegally. He prescribes a sedative, and gives some directions which are likely to soothe her last moments. This is not right according to the Chief Baron, either medically or morally. Administering to the patient

in ignorance, the Surgeon may use the wrong remedy, and so injure the reputation of the quack. The proper line of procedure is this:—Before venturing to act the part of the good Samaritan, or yielding to the first impulse of humanity by trying to assuage the dying agony, he is to call to mind the fact that his social duties are comprehensive, that all men are brethren, and that a pretender to Medical science is emphatically to be held a brother until the negative has been formally proved. The Fellow of the College is therefore at once to go to his supposed brother, learn from him the patient's constitutional history, the nature of her disease and injuries, and the drugs his skill has suggested to complete the mischief done by his instruments. Then, enlightened by this useful information thus rationally obtained, he may return to the bedside of the dying creature, satisfied that he is now competent to treat her condition safely to herself and equitably to "his brother." Such is the dictum of a man whose bodily tortures we hope, as a brother, may never be aggravated by the mental distress of seeing the Surgeon whom he has sent for in the hope of relief, neglect his immediate duty for the sake of indulging in some over-refined speculations as to his idiosyncrasies, or some quixotical notions about the honourable treatment of empirics. The Medical opinion now promulgated from the bench is simply this, that there are no such things as the pains of pregnancy as distinct from the pains of labour, and that the discharge of a certain quantity of fluid from the uterus during pregnancy is to be held as a sure indication that labour has commenced. The palpable absurdity of these opinions makes comment unnecessary; and one can only lament that some people, even before imbecility has become an excuse, are prone to "babble o' women."

The Surrey Lunatic Asylum affair has not yet gone to its final rest. The Commissioners of Lunacy have been carrying on a further dispute, in reference to the re-instatement of Mr. Snape by the Committee of Visitors to the Asylum. The Committee has replied, and copies of the whole, together with Mr. Snape's defence and all the evidence, are now embodied in a *Return* of seventy heavy pages. We do not see that any new light is thrown over the case, except that the letter of the Commissioners proclaims very clearly the fact that the commission would be much more efficient if the Medical element in it were strengthened. According to present arrangements this Board of Lunacy Commissioners, engaged constantly in considering the requirements of the insane, is obliged, when any important question comes before it, to call in extraneous assistance, and to ask questions which its members, of all men, ought to be most able to answer correctly. We shall surely see next the Judges of England calling in Sir Frederick Thesiger, and two or three other members of the Bar, to explain the law in some case of appeal.

A great deal of nonsense has been written about our Military Hospital at Woolwich, and a still greater absurdity is the setting up Miss Nightingale as the arch-director-general of military hospitals. On the latter point we need not say much, as our army Medical brethren can very well afford a little *éclat* to their feminine coadjutor; but we must correct some mistaken statements about the Woolwich Hospital. It is not a model hospital. It is not a new hospital. It is not what we hope our hospitals at Netley, Portsmouth, and Jersey will be; or the new hospital at Woolwich when it is built. But we maintain that it is in as good a sanitary condition as any Civil Hospital in the Metropolis. We cannot admit it to be an objection to an Hospital, that it is "high up" on the side of a hill, and should even like it better if it were on the

top. As to the "stupid system of ventilation," it is that by open windows and open fire-places, which all experience is tending to prove to be far better than any artificial system. Another objection is, that the wards are "absurdly small." Here, again, all evidence is in favour of small over large wards, provided there be no crowding; and there is none at Woolwich. Six patients in a small ward always do better than twelve in a ward of double the size. It is true that the utensils are not elegant, but they are clean—and as to the Itch Ward and Bath Room, they seem admirably adapted for their purpose. If we appeal to results, they are certainly in favour of the plan, for of 18,775 patients treated in the last three years, only 263 died. There is very little erysipelas, and pyæmia is almost unknown. Perhaps our civil hospitals might take a hint from the system of cleaning, warming, and ventilation adopted at Woolwich; and if they would warm by open fire-places, ventilate by open windows, and clean by dry-rubbing, we are convinced pyæmia would nearly disappear from their wards.

The "threatened murrain" must not be confounded with the question of diseased meat. Pleuro-pneumonia has prevailed epidemically in many districts of this country for many months past. Many diseased cattle have been slaughtered and sold for food in our markets. This is only to be checked by attention to the sanitary condition of the cowsheds and their occupants, and strict supervision of slaughterhouses and markets. But on the Continent there is a contagious typhus prevailing among the cattle; and we should do our best to prevent the introduction of this disease, either by altogether prohibiting the importation of foreign cattle, or by establishing a quarantine of observation of at least fourteen days upon all cattle arriving from abroad. Nothing would be easier than to keep all such cattle in a detached, well-aired shed, until it could be determined whether they were diseased or healthy.

Among the members of the late House of Commons who have lost their seats, is the eccentric Medical representative of Bodmin, Dr. Michell. The vacancy, however, is filled by a Medical man whom we may look upon, to say the very least, as a great improvement upon the late Medical M.P.—John Boyd, M.D., has been returned to Parliament without opposition, for the borough of Coleraine in the county of Londonderry. Dr. Boyd represented the borough from 1842, until, in 1852, he retired to make way for Lord Naas, who had been rejected by the county Kildare on his appointment as Chief Secretary for Ireland under the government of the Earl of Derby. *Saunders's News-Letter* says of Dr. Boyd:—"Dr. Boyd's influence among the electors is very great—so great that no man could, under ordinary circumstances, successfully contest with him the representation. This was strikingly illustrated a few years ago, when Sir Harvey Bruce, with all his pretensions as a local proprietor, and favourite with the higher class of Conservatives, was unable to oust the learned doctor from his seat. Dr. Boyd is a gentleman holding strong Conservative opinions, and, although not much of an orator, excels in that exquisite tact which so frequently does duty for talent."—We have not heard of other Medical members, but the amiable Lord Robert Grosvenor, the active supporter of homœopathy and every other form of quackery, has obtained the votes of men whose profession he will deride in the House of Commons whenever opportunity offers.

A very serious case of suspected wife-poisoning has just occurred at Chorley, near Bolton, and is still the subject of legal investigation. The deceased woman was seized suddenly with violent vomiting and purging, and on being ques-

tioned by her father, she stated that her husband had administered to her some gruel upon two occasions, and that immediately after swallowing it she was attacked with illness. It appeared that the deceased woman was in four different burial clubs, and that at her death her husband would be entitled to receive some money for the ostensible purpose of burying her. It was proved that the husband had procured poison; both arsenic and antimony having been found in his possession. The arsenic which was sold to him was coloured with indigo, and labelled "poison;" and it would therefore appear that such precautions do not prevent the employment of arsenic for felonious purposes. The stomach, duodenum, ileum, part of the colon and rectum, a portion of the liver, and gall-bladder, the spleen, a kidney, and some blood of the deceased woman, were sent to Mr. H. H. Watson, of Bolton, who, on analysis, discovered the presence of antimony and arsenic in all. As the investigation of this case has not yet terminated, we abstain from comment for the present, merely remarking that the body was interred in the usual manner, and was exhumed only in consequence of suspicions arising after the funeral. Surely the system of registration must be somewhat lax, which could permit the interment without inquiry of a woman who had been poisoned by arsenic.

We are glad to see that the *Morning Chronicle* is taking up the cause of the Medical Profession. Here is a paragraph from a leading article on Thursday, which is an echo of many of our own:—"Had Medical men been true to themselves, offices in the gift of the Government now filled by lawyers and others, which are the legitimate right of Medical men, would now be filled by some of them. It is a melancholy and dangerous fact to observe that the office of President of the Board of Health is now filled by a man ignorant not only of Medical, but also of the least idea of general science—one who is a mere ministerial machine, a complete political nonentity."

REVIEWS.

On the Diseases of the Bladder and Prostate Gland. By WILLIAM COULSON, Surgeon to St. Mary's Hospital, etc. Fifth Edition. London: 1857. 8vo. Pp. 640.

VERY considerable additions have been made to the present edition of this well-known work of Mr. Coulson, especially to the chapters on vesico-vaginal fistula, malignant tumours of the bladder, and lithotrity, many new engravings being also introduced. It is to these chapters, therefore, that we shall confine ourselves in the present notice.

In the chapter on Malignant Tumours of the Bladder, Mr. Coulson refers to the various forms of cancer of the bladder, describing scirrhus as very rare, and the two forms of medullary cancer, the ordinary medullary tumour, and the medullary fungus, as more frequent. The following remarks on the physical signs of these malignant diseases will be read with interest.

"On examination, then, the surgeon will frequently discover that the urethra, prostate, and neck of the bladder are free from organic disease, and this discovery will considerably restrict the field of his inquiries, showing that the cause of disease is limited to the bladder.

"This organ should now be carefully explored in its turn; a few ounces of tepid water are injected into the bladder, and a catheter, the curve of which is short, is introduced. The extremity of the instrument may be arrested a little beyond the internal orifice of the urethra, or it may pass freely into the bladder.

"In the latter case, by slowly revolving the point, and by making the end of the instrument sweep, as it were, the fundus and sides of the bladder, it will rarely happen that the existence of a tumour is not discovered. Unless the morbid growth be very large or placed in a particular position, the

presence or absence of stone may be, at the same time, determined.

"The existence of a tumour in the bladder, taken with the rational symptoms which I have described, is strong presumptive proof that the morbid growth is of a malignant nature.

"But positive proof as to the nature of the tumour is still wanting. This can only be obtained by microscopic examination of any portions of the morbid growths which may happen to be discharged with the urine. In one case, which occurred in my own practice, a correct diagnosis was thus formed; and other cases have, I believe, since then occurred in the practice of other surgeons.

"The peculiar structure of villous cancer, and the quantity of nucleated cells collected on the surface of the dendritic vegetations, render it certain that these cancer-cells may be discovered in the urine, even independently of the discharge of fragments of the morbid growth itself. They should be sought for in the urine passed during severe paroxysms, especially when attended by copious discharge of blood."—P. 227.

The chapter on fistulæ of the bladder contains a good account of vesico-vaginal fistula, and the means adopted to effect relief, or bring about a radical cure. Mr. Coulson very correctly states that very little good is ever done by sponges, plugs, or bottles, used as palliatives. His own experience has not afforded him a single case in which a cure has been effected by cauterization, and even in cases of simple fissure he recommends operation. The various methods of operating are described at some length, including that of Bozeman.

In the chapter on lithotrity Mr. Coulson has modified his former conclusions as to the use of chloroform. He holds to the opinion he expressed, that it should not be employed as a general rule, but he now admits many exceptions. In the female, in unmanageable children, in nervous males, and in cases of irritable bladder, he now uses it; also at the close of the treatment when ascertaining if any fragments remain.

In comparing the relative statistical results of lithotomy and lithotrity, Mr. Coulson has prepared the following table of the general mortality after lithotomy, which is of considerable interest. Mr. Coulson, it may be observed, does not give the result of his own experience.

"General Mortality after Lithotomy.

LOCALITY.	Number of Operations.	Males.	Females.	Deaths.	Proportion of Deaths to Cases.
Luneville Hospital	1492	1433	59	141	1 in 10.58
*Hotel Dieu, 1808 to 1830 ..	100	95	5	28	1 in 3.57
*La Charité, 1806 to 1831 ..	70	—	—	35	1 in 2
*Beaujon, *La Pitié, *Maison de Santé	56	53	3	18	1 in 3.11
*Ten Departments of France ..	110	—	—	24	1 in 4.58
Private patients in Paris in 10 years:—					
Dupuytren's table	356	—	—	61	1 in 5.19
*Austria	133	—	—	25	1 in 5.32
*Bavaria	136	—	—	28	1 in 4.85
*Lombardy	1044	—	—	217	1 in 4.81
Naples	308	298	10	47	1 in 6.80
*Wurtemberg	120	120	—	7	1 in 17.14
*Bohemia	36	—	—	4	1 in 9
*Dalmatia	40	—	—	4	1 in 10
*Roman States	33	—	—	3	1 in 11
*Sardinia	21	—	—	6	1 in 3.50
*Sweden	36	—	—	5	1 in 7.20
*Denmark	35	—	—	12	1 in 2.91
*Cork Infirmary	15	—	—	0	—
St. Thomas's Hospital	144	—	—	15	1 in 9.60
Bristol Infirmary	354	347	7	79	1 in 4.48
Leeds Infirmary	197	—	—	28	1 in 7
Norwich Infirmary	704	669	35	93	1 in 7.57
Radcliffe Infirmary, Oxford ..	101	95	6	13	1 in 7.76
St. Mary's, Moscow	411	—	—	42	1 in 9.78
Pennsylvania Hospital	83	—	—	10	1 in 8.80
Dupuytren's Bilateral Operation ..	42	38	4	9	1 in 4.56
Cheselden	213	—	—	20	1 in 10.65
Liston	115	—	—	16	1 in 7.18
Total	6505	3148	129	990	1 in 6.56

"From the above table it would appear that the general mortality of lithotomy is 1 in 6.55, or about 2 in every 13 cases. The returns from the Luneville Hospital were published by Castara; those from Moscow by Dr. Roos, of St. Petersburg; those marked with an asterisk by M. Civiale, in his work on calculous disorders."

Other tables follow, showing the influence of age and the size of the stone on the result of the operation. As to different methods of operating, Mr. Coulson shows that, of 1986 cases operated on after the method known as the apparatus major, the deaths were 1 in 4·89; of 268 cases by the high operation, 1 in 3·08 died; of 2242 by Cheselden's operation, the deaths were 1 in 7·38; of 207 by the bilateral method, the deaths were 1 in 6·46; of 185 cases by the recto-vesical operation, the deaths were 1 in 4·87.

As to the statistics of lithotrity, the general result appears very favourable when compared with lithotomy. We may arrange the results, as given by Mr. Coulson, in the following table:—

Operator.	No. of Operations.	Deaths.	Proportion.
Civiale	591 . .	14 . .	1 in 42·21
Brodie	115 . .	9 . .	1 in 12·77
Leroy	116 . .	11 . .	1 in 9·70
Campanella . . .	10 . .	0 . .	..
Early operations in Italy	112 . .	9 . .	1 in 12·80

Mr. Coulson repeats Heurteloup's assertion, that he lost only 1 patient in 38, but does not give the result of his own experience, which is to be regretted, as it is known to be very extensive.

We must here conclude our notice of this edition of Mr. Coulson's work, recommending it to the attention of our readers as a work the practical Surgeon will do well to refer to and consult when treating cases of disease of the urinary organs.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

THE BITTERA FEBRIFUGA AS AN ANTIPERIODIC.

By M. DELIOUX.

The practitioners of Martinique having transmitted to Europe highly favourable accounts of the febrifuge qualities of a plant found there, the Minister of Marine has directed that its efficacy should be tested at the different naval hospitals; and in this paper, M. Delieux furnishes an account of the results of the trials he has made of it at Brest. The plant is one of the Rutaceæ, and has been termed *bittera febrifuga*, from the English term "bitter-ash," by which it is popularly known at Martinique. Its active principles are resident in a bitter resinoid, and in a bitter principle, which it is proposed to term *bitterine*, and which is very analogous, if not identical with *quassit* or *quassine*, obtained by Wiggers from *quassia amara*.

The *bittera* may be administered in the form of powder, infusion, or extract, or the *bitterine* itself may be given in pills. The intense bitterness of the drug disinclines some patients to it. M. Delieux has, as yet, only given it in the form of extract, made into pills, administering from 10 to 15 grains, in divided doses, during the pyrexia. This, he believes, is a better mode of giving this and other bitter tonics, used as succedanea to quinine, than prescribing them, as in the case of quinine itself, in a large dose just before the paroxysm. Although declared in the Antilles to be an almost infallible febrifuge, sometimes superior to quinine itself, M. Delieux believes it to be, in this respect, not only much inferior to quinine, but also second even to arsenic,—superior to the latter, though it be, in the tonic power it exerts upon the digestive and general system. After this, however, it should be ranked as one of the best succedanea; and, doubtless, as a good bitter tonic it is destined to play an important part in the relief of many organic and functional debilitated conditions, and especially in the anæmic and cachectic states resulting from paludal intoxication. In a great number of asthenic diseases, in anæmia, in chlorosis, in convalescence from fever, in exhaustion from hæmorrhages or discharges, and whenever it is desired to impart tone to the digestive and assimilatory powers, the *bittera* is indicated. In some forms of gastralgia, as far as M. Delieux's experience has gone, he believes it will prove very useful.—*Bull. de Thérap.* tome li. pp. 20, 347, 465.

CASE OF EXTRA-UTERINE PREGNANCY, TREATED BY CAUSTIC.

By Dr. MARTIN.

The patient was the wife of a *propriétaire*, in a country district of France, 36 years of age, and of good health and constitution. Married at 19. She had a child at the end of the first year, and fifteen years elapsed before another pregnancy occurred. This dated from the end of October, 1855; and at the end of December she was seized with violent pains, resembling those of labour, which were followed by true peritonitis, with intense fever. When this had been subdued, the abdomen, which before this presented nothing remarkable, had so changed in form as to give rise to the supposition of extra-uterine gestation. Difference of opinion upon this prevailed among those consulted, and we have no account of the progress of the case until the beginning of August 1856, *i. e.* the termination of the normal period of pregnancy. Then, pains as if announcing approaching delivery set in, but these were at first irregular, vague and purposeless. On the 8th of August, however, they had become severe, and now on examining the uterus no doubt could be entertained of the existence of extra-uterine pregnancy, and the urgency for interference became obvious. It was determined by the practitioners consulted in the case, in order to prevent effusion into the peritoneal cavity, to secure the formation of adhesions between the cyst and the walls of the abdomen by the employment of caustics for effecting the opening. The first application was made on the 11th of August (the mother had felt the child move the evening before, although no sounds were audible to the ear), the caustic paste being so directed as to produce an eschar 50 centimetres in length (about 18 inches) running parallel to the *linea alba*, and being about three fingers' breadth to the left of the umbilicus, which was situated opposite to the middle of the eschar. The application of caustic paste (the composition of which is not given) was repeated twice, and Canquoin's paste was also applied three times, the mortified parts being carefully removed by the bistoury after each cauterisation, and the caustic again applied at the bottom of the wound. After the fifth application the cyst and the membranes were opened, not a drop of blood having been lost. On the 26th of August, *i. e.* fifteen days after the first application had been made, extraction was performed. Much *liquor amnii*, discoloured by meconium, had already flown away: on pushing back the head, which projected through the artificial opening, the foetus was found to be free and floating as in its natural cavity. The cyst, which was a line and a half in thickness, was intimately united by solid adhesions to the internal wall of the abdomen, so that no fear existed of effusion into the peritoneum. The edges of the aperture were enlarged as much as possible by the removal of the *débris* of the eschar, without going beyond the limits of the cauterisation, or giving rise to bleeding. As the child was dead and the head very large, an incision was made into the scalp, so that the frontal and parietal bones could be extracted. Pelvic version was then performed with great facility, and a fine viable child removed. About half an hour after severe hæmorrhage came on, and the placenta was found to be so adherent to the cyst as to require to be detached piecemeal; the bleeding then ceased, but the patient suffered from prolonged syncope, requiring the use of restoratives. Compresses soaked in vinegar and water were applied to the wound, and kept on by means of a towel, which exerted a moderate compression on the abdomen. These were left on for three days, when the coagula of blood which had formed in the cyst were removed. During the first four days the patient felt very enfeebled, but no inflammation supervened, and at the end of a week she felt well and comfortable. Every day injections were thrown into the wound, at first of an emollient, and afterwards of an astringent nature. Gentle laxatives were given from time to time, and the strength was kept up by good diet. At the end of the third week she was able to walk in her garden. The last report comes down to the 25th of September, when she was going on quite well, getting up every day. The wound was still an inch in length and six in depth, but in a very healthy state.—*Revue Médicale*, 1856, tome ii. p. 673.

EXCERPTA MINORA.

Creosote in Erysipelas.—Dr. Delarue strongly recommends the following application in erysipelas, which he believes exerts even a specific effect upon the disease: *Creosote 8 parts, lard 30 parts, to be applied to the parts every two hours.*

Red Line of the Gums in Phthisis.—Drs. Saunders and Draper, with the view of testing the value of the sign of phthisis indicated by Thomson, have examined the gums in 451 cases of various forms of disease occurring in the Bellevue Hospital. They conclude, 1. The red line, though it occurs frequently in phthisis and chronic blood diseases, is by no means characteristic of them. 2. In pregnant and recently delivered women, it occurs more frequently and is better marked than in any cases examined. 3. That age and sex exercise no influence on its existence.—*New York Journal*, Jan., p. 64.

Employment of Amylene for Children.—M. Giraldes, as the result of the employment of amylene in place of chloroform in the cases of 25 children of different ages, draws the following conclusions:—1. It is respired more easily, and with less struggling than chloroform. 2. Anæsthesia takes place very rapidly. 3. The sleep is more calm and natural, and is unaccompanied by stertor. 4. The patients rapidly return to their normal conditions. 5. It does not induce nausea, vomiting, or cerebral congestion. 6. The patients suffer no inconvenience afterwards, recovering all their cheerfulness.—*Comptes Rendus*, 1857, No. 10.

External use of Clay.—Dr. Betz employs clay mixed with water, and spread some lines in thickness upon rag as a poultice in cutaneous, cellular, and lymphatic inflammations, in panaritis, periostitis, periphlebitis, etc. The application must be often renewed. He believes its utility is attributable to the great affinity the clay has for water, so that sprinkled upon suppurating surfaces, it quickly causes the absorption of the fluids, and the formation of a crust. So also it absorbs water through the uninjured skin, which becomes wrinkled. Its influence may be farther attributed to its low temperature.—*Schmidt's Jahrb.*, Band 93, p. 174.

Sleeplessness in Chronic Syphilis.—Professor Sigmund calls attention to a series of cases, the subjects of which at an earlier period had suffered from syphilis, but may have ceased to present any signs of it, the sleeplessness in most cases coming on some years after these have disappeared. There is no apparent peculiarity in these persons to account for it, and it resists the employment of narcotics. Most of the patients go to sleep at their usual time, but after 3 or 4 hours wake again, and that day after day, at the same hour, and remain awake without any apparent bodily suffering. Any remains of syphilis that may be detected consist in trifling affections of the skin and mucous membranes, slight fugitive pains, and a relaxed, dirty-looking skin. Mercurial treatment usually leads to a rapid improvement.—*Schmidt's Jahrb.*, Band 93, p. 196.

Mortality of Infants in Russia.—Dr. L. Besser states that in the 7 years, 1849-55, there were 183,125 children born dead, the illegitimate being a third more frequent than the legitimate. The proportion of males to females was as 134 to 100. Exclusive of dead-born children, there died in the 7 years, 837,602 children under 1 year, and 602,243 between 2 and 5 years, giving, upon the births occurring during the same period, a mortality of above 35 per cent. during the first five years of life.—*Schmidt's Jahrb.*, Band 93, p. 213.

Diaphoresis in Albuminuria.—Dr. Smith, in giving an account of 25 cases of albuminuria treated at the New York Hospital, draws attention to the advantage derived from exciting diaphoresis, not only by the administration of Acetate of Ammonia and Ipecacuanha, 3 or 4 times a day, but also by the external use of the hot air bath, (also 3 or 4 times daily,) for the space of a quarter of an hour. The hot air bath may be very simply constructed. A large tin conical canister, has a spirit lamp placed at its bottom, and a rectangular tube affixed to its top. The air which gains admission by holes in the lower part of the canister becomes heated and passes out at the extremity of the tube, which is placed beneath the bedclothes.—*New York Journal*, Jan. p. 68.

GENERAL CORRESPONDENCE.

ON THE ACTION OF ATROPIA ON THE EYE.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have received a letter from one of your readers, requesting me to explain further my view of the action of turgescence and relaxation of the ciliary body on the for-

ward and backward movements of the lens; and I shall be glad if you will allow me to reply in the Journal.

In my letter in your Number for the 14th of March, I observed that, "For near vision the pupil contracts and the lens advances." The veins of the iris and ciliary body are, I believe, at the same time compressed by the ciliary muscle, causing turgescence of these erectile parts. The turgescence of the iris co-operates with the contraction of its circular fibres to close the pupil. The turgescence of the ciliary body must exert pressure on the vitreous humour, which, diffused equally through that fluid, takes effect on the only yielding point—the lens—and pushes it forward, just as a patient is raised by pressure on the side of a water-bed. The direct action of the ciliary muscle in, at the same time, drawing forward the lens, cannot be great in man.

When atropia is applied to the eye, I believe that it reaches by imbibition the arteries entering the iris and ciliary body—constricts them—impedes the flow of blood to, and relaxes, these tissues. The constriction of the arteries of the iris, with its consequent relaxation, draws into action by functional sympathy (and without the intervention by reflex action of the brain or cord) the radiating fibres, and dilates the pupil. The relaxation of the ciliary body must cause the advance and expansion of the vitreous humour around the lens; while the lens itself recedes, to occupy the place of the displaced fluid.

That the lens recedes and approaches the retina in the atropised eye, is proved by the vision being clearer in the distant than with near objects, and by its furnishing a smaller image than the healthy eye of an object at the same distance from both.

Among other observations which I have made on the atropised eye, I found that, in adapting the telescope to it, the instrument requires to be lengthened, as compared with the other eye; but, the focus having been adjusted, vision is perfectly clear. Indeed, several of those who made trials with the telescope maintained that they saw better with the atropised eye—a fact deserving of the astronomer's attention.

The smaller image of the atropised eye, as compared with the other, is made very manifest by the reflecting stereoscope.

I am, &c.

Cork, March 25, 1857.

ALEXANDER FLEMING.

SULPHUR IN RHEUMATISM.

[To the Editor of the Medical Times and Gazette.]

SIR,—About two months ago there appeared in the Hospital Notes of *The Medical Times and Gazette*, a notice of some cases of rheumatism and sciatica, treated by Dr. Fuller, in St. George's Hospital. In that notice there appeared to be put forward a claim to originality for Dr. Fuller, in the external application of sulphur with flannel bandaging in those cases. As I have been for years in the habit of using those remedies, and having publicly in some of the medical societies mentioned it, I hope you will kindly give me space to establish my claim to originality in the practice. Long before the second edition of Dr. Fuller's book was published I had given publicity to the treatment.

Nearly three years ago, during a discussion at the Medical Society of London, on a paper read by Mr. Hancock, "On the Treatment of Sciatica," I stated that, amongst other remedies, I had been for years in the habit of having recourse, with success, to the external application of sulphur, with bandages of new flannel, in the treatment of that painful affection; and subsequently, in a discussion on Dr. Garrod's paper, "On the Treatment of Rheumatism," read at the Royal Medico-Chirurgical Society on February 13th, 1855, I mentioned the fact of my successful treatment of chronic rheumatism by the same remedies. In November, 1856, I recorded some cases of acute rheumatism successfully treated in the Royal Free Hospital with bicarbonate of potash, by me. In one of those cases, which had assumed somewhat of a chronic form, the patient having been attacked with rheumatism three months before his admission to the Hospital, one of the knees continued painful and stiff, the joint not admitting of motion. The external application of sulphur, with the flannel bandage, was had recourse to, with almost immediate relief, and the man was discharged cured in a few days.

Surely with the knowledge of what I have stated, Dr. Fuller ought to have given me the credit which he claims for himself; besides, after the discussion on the paper of Mr. Han-

cock, alluded to in the above extract, I communicated to Dr. Fuller on the same evening the mode in which I applied the remedies, and at the same time gave him the names of two Physicians, one of Edinburgh the other of Dublin, who many years before had written on this use of flannel bandaging in chronic rheumatism; a plan of treatment which he declared until that evening he had no knowledge of.

But, Sir, besides the evidence I have already given of my claims to originality in this plan of treatment, I have, as you are aware, now in my possession a note from Dr. Fuller, bearing date "Thursday, March 13th, 1856," in which he reminds me of my observations at the Medical Society of London two years before that date, on the external use of sulphur and flannel bandaging, and asks of me information on the subject.

I am, &c. WILLIAM O'CONNOR, M.D.

30, Upper Montagu-street, Montagu-square.
March 31, 1857.

THE CRIMEAN SANITARY COMMISSION AND THE ARMY MEDICAL OFFICERS.

[To the Editor of the Medical Times and Gazette.]

SIR,—With reference to the "delicate question" that has arisen between Sir John Hall and Dr. Sutherland, or rather between the Military Medical Officers and the Sanitary Commissioners, alluded to in an article in your Journal of the 21st ultimo,—I shall feel obliged if you will give insertion to the following remarks on this subject from one who was present in the Crimea throughout the whole of that trying period.

Sir J. Hall's prompt, honest, and straightforward correction of the error into which Lord Palmerston has fallen while endeavouring to damage the Tulloch and M'Neil cause at our expense, has given great satisfaction to the Medical Officers of the Army, who have so long been accustomed to misrepresentation and abuse, that this attempt to appropriate their labours and rob them of the just credit due to their unwearied exertions in times of unparalleled pressure and hardship, by gentlemen who share neither their toils, dangers, or privations, has not created much surprise, though some indignation and disgust.

The so-called Sanitary Commissioners only arrived in the Crimea in the month of April, when we had emerged from our difficulties, and "the sun of our prosperity had begun to shine," to use an Oriental proverb.

The advent of these excellent and amiable old gentlemen, caused both wonder and amusement among military officers. To us, professionally, it was simply a matter of surprise; we had good reasons for accounting for this, as well as other useless jobs perpetrated in those times, but were really at a loss to know on what grounds they founded their claims to teach us military hygiene; although we were all well acquainted with their valuable labours in the lanes, alleys, and cesspools of this vast metropolis, yet could not exactly discover in what way this entitled them to supersede the medical officers of the army in their peculiar functions. Conversing with them, I was led to the conclusion that they had found little or nothing to suggest that had not already been done, and were merely there to assist us in forcing on the military authorities more immediate and prompt attention to our recommendations, being invested with more power than was conceded to the principal medical officers of the army! Dr. Sutherland's reply, however, to Sir J. Hall, would lead to another inference; "they were required to see that the sanitary condition of the hospitals, as the ventilation, drainage, water supply, number of sick, were such as to give fair scope to the medical treatment," in other words, they were to teach us our duties and see that we performed them. Amusing idea, if not so presumptuous and insulting. What did these gentlemen suppose they could teach us? "As to the sanitary work done in the Crimea" by the Government Commissioners, if Mr. Russell will endorse it, we shall be happy to yield them the credit, claimed also by others making political and philanthropic capital out of the miseries and misfortunes of war, of having saved the British army, and being therefore entitled to the most distinguished honours, and the gratitude of the nation.

I am, &c.

London, April 17, 1857.

J. M.

THE "MARSHALL HALL METHOD" OF TREATMENT IN ASPHYXIA.—CASE OF TWINS.

[To the Editor of the Medical Times and Gazette.]

SIR,—Considering it the duty of all who have tried with success Dr. Marshall Hall's ready method for recovering newborn infants in whom all respiration has ceased, I make no apology for sending you a short account of a case which has just occurred in my own practice. On the 25th instant I was hastily summoned to attend Mrs. T., about two miles distant from my house, in labour with her third child. On my arrival I was informed by the nurse that she had been flooding a good deal—an intimation which led me to make an examination without loss of time. I found the labour progressing favourably, and after waiting a short time a smaller and lighter infant than usual was born. I immediately suspected the presence of another, which, upon further examination, proved to be the case, the presentation being a breech one. Having ruptured the membranes of this second ovum, and nothing calling for immediate interference, I waited till the head entered the pelvis, when I accelerated the expulsion in the usual manner. Though only about three-quarters of an hour elapsed between the birth of the first and second child, the latter was born completely asphyxiated. Neither respiration nor pulse was perceptible. Immediately commenced the "ready method," and after about twenty minutes' perseverance had the satisfaction of seeing the return of partial life; in about ten minutes more respiration was fully established, and the child cried out. The mother and infants are doing well.

I am, &c.

R. B. NEWHOUSE.

Coleshill, Birmingham, March 28, 1857.

CLINICAL TEACHING IN EDINBURGH.

[To the Editor of the Medical Times and Gazette.]

SIR,—When in Edinburgh lately, I was passing the Infirmary on one day about 12 o'clock, and was attracted by the crowd of Medical students hurrying to it from the neighbouring College; and, carried by the torrent into the wards under the care of Dr. Hughes Bennett, Professor of Clinical Medicine, my curiosity to witness the present mode of clinical instruction, or that, at least, practised by this eminent Physician, was amply gratified; and I left the ward with a conviction that, at last, perfection in this important part of Medical education had been attained. Instead of the former plan, of a few hurried questions to the several patients, overheard by not a tithe of the attendant students, and a subsequent reference to the cases in the lecture-room, the following method was adopted:—The Professor placed his chair by the side of a newly-admitted patient affected with confluent small-pox, and the students, amounting to about forty or fifty in number, formed a circle wide enough to enable every one perfectly to see and hear everything that took place. After calling over the names of some absent students, the first present in the catalogue was requested to stand on the other side of the patient, and to examine the patient, in order to ascertain the history and nature of his disease. This he accomplished with the assistance and correction of the Professor, who, in a very clear and able manner, pointed out the best manner of describing symptoms and relating the history of diseases; and, after the student appointed to this duty had concluded his examination, many of the others were requested, in rotation, to suggest other questions. The examining student was then desired to name the disease, and the same question was put to several of those surrounding the bed. There was a difference of opinion; the first stating that it was scarlatina, the other variola. The reason of the opinion that it was scarlatina was required by the Professor, who succinctly explained the diagnosis between the two diseases. Then came the question of treatment, which was answered in the same way; the other students suggesting several things omitted by the examiner of the case,—all of which were commented upon, and opposed or approved of by the Professor, who fully explained the reasons of his preference. The examiner was then called upon to prescribe for the patient, the Physician's clerk being present with his prescription-book. This he would have gladly done in the abbreviated style, but he was not allowed to cut off the tails of his dog-latin, and the antim. tart. (as he called the selected diaphoretic) was objected to as forbidden pastry.

The whole proceeding occupied more than half-an-hour, and formed to all present an admirable and indelible lesson on small-pox. The only objection which occurred to me was, that such an examination and discussion might be displeasing to the patient; but I was assured, by a student who stood by me, that this was not the case, although Dr. Bennett, he said, did not so examine those labouring under great weakness. Many patients, no doubt, would think that their cases were more thoroughly investigated by such a procedure, which in some aspects resembles the thorough and complete trial with which the accused are privileged in British courts of justice.

Among the points mooted in the question of treatment was, the best mode of preventing pitting of the face. Dr. Bennett alluded to the trials of various plans which had been made in the hospital, and declared his preference to an unctuous application, consisting of calamine and olive oil. As this is a material point, in respect particularly to young females, I may be permitted, as having constituted one of the circle of students, to suggest a further trial of the strong solution of lunar caustic, recently recommended in your pages.—I am, &c.

London, 1857.

MEDICUS.

ON THE TREATMENT OF PILES, AND PROLAPSUS OF THE RECTUM.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the course of some very useful and interesting remarks on the treatment of internal piles by ligature, in your report of the London Practice of Medicine and Surgery, after reference to the results of this practice in the hands of some of our most experienced surgeons, there occurs the assertion, "the operation is a perfectly safe procedure." This statement is made notwithstanding the admission that Sir B. Brodie had lost two patients from the application of the ligature, and that some other gentlemen had seen death result from the practice; and as in my opinion such a statement is liable to mislead, I am anxious to prevent my professional brethren from putting too much faith in it.

I am most willing to admit that the ligature is the most effectual remedy in removing hemorrhoidal excrescences which have existed for a long time, and have perhaps induced, or become complicated by, prolapsus of the gut. Nevertheless, I do not believe, from what I have seen and know, that any surgeon can conscientiously tell a patient that the operation by ligature is a "perfectly safe procedure." Cases of death after this operation have occurred, and have not been made known to the profession; moreover the operation is attended sometimes with extreme suffering, such as I have not often witnessed after other surgical proceedings; it is necessary that the patient should keep to his bed for several days, and after all, the operation occasionally fails.

There is, however, a remedy which, in a very considerable proportion of cases of piles requiring active surgical interference, may be looked upon as perfectly safe. I mean, nitric acid. Those gentlemen who have most frequently used it, viz., Dr. Houston of Dublin, and Mr. Henry Lee, speak highly in its favour; it has occurred to myself to employ it in a considerable number of cases both in public and in private practice, and it has been attended with remarkable success, not in simple uncomplicated cases, but where the disease has existed as long as twenty years, and has been attended with most urgent suffering; also in cases of prolapsus of the rectum which have existed for a period of many years, and have been considered by the patients to be incurable. I have, on former occasions, published some cases of the kind in your journal, and I have lately had under my care two cases of prolapsus of the gut where the treatment by nitric acid was eminently useful.

The one patient was a man, aged 66, who had suffered for fifteen years, not only with the prolapse when at stool, but the simple exertion of walking brought the gut down. One free application of the acid sufficed to remedy this condition. The other was a gentleman, between fifty and sixty, who had for many years suffered from prolapsus to a great extent. In this case I hesitated in giving a prognosis as to the result of treatment by nitric acid, and mentioned the possibility, and even probability, of the ligature being required. However, three applications of the acid sufficed to restore this gentleman to comfort from misery, without a single day's confinement.

This treatment, like others, will occasionally fail. I have had two cases in females where I did not succeed in removing

the diseased condition of the rectum to my satisfaction, and of course cases will be repeatedly met with where the ligature is absolutely necessary. Nevertheless, experience has convinced me that the ligature is employed much more frequently than it ought to be, and that in numerous cases, both of internal piles and prolapsus, its use, which is now and then followed by death, is attended with great suffering, and necessary confinement to bed, and should be dispensed with, in favour of the nitric acid, a remedy more safe and as effectual.

With reference to the permanency of cure after nitric acid, I may mention that I accidentally met an old gentleman, a few days ago, who had three years previously submitted to treatment by nitric acid for hemorrhoids of twenty years' standing, attended with profuse hæmorrhage and suffering. He told me that the cure I had brought about had continued complete.

I am, &c.

Caroline-street, Bedford-square.

HENRY SMITH.

[Mr. Smith has not given a just impression as to the statement referred to, from omitting the context to it, which is as follows:—"With the above amount of evidence before us, we may fairly conclude that ill consequences after ligature of piles, performed in moderately healthy persons, and with due attention to the exclusion of dilated veins, are exceedingly rare, and that the operation is a perfectly safe procedure." It is to be observed that Mr. Smith does not give us a single additional fact as to the danger of the ligature. The question is one of fact and not of opinion.—ED.]

RAPID AND UNEXPECTED DELIVERY.

[To the Editor of the Medical Times and Gazette.]

SIR,—Having a few months ago had a midwifery case analogous to those lately reported in your valuable hebdomadal by Messrs. Clough and Wilkinson, I send you the leading facts for publication, as I think its importance in a medico-legal point of view cannot be over-estimated.

An eminent legal practitioner ran to my house early one morning, and requested I would go quickly with him to see his wife. I did so, and found her in a state of alarm, sitting on the commode beside her bed, and exclaiming that her child was born; going to her assistance, I found the infant, with placenta attached, submerged in the contents of the pan, which contained a large quantity of fluid. I hastily removed both mother and infant from their perilous position, getting the former to bed, etc.; as to the child, which was a premature male, (8 months,) it was apparently asphyxiated, and some time elapsed before I could restore it to animation; in all probability, had another minute passed before assistance was procured the child would have been lost.

This was the lady's ninth confinement; her labours had generally been quick, but never so rapid as this. Having the previous evening taken castor oil, she did not think some slight *abdominal* pains that she felt indicated labour, but feeling as if she required the night chair, seated herself upon it, when she had *one severe pain*, which expelled both the infant and placenta; nothing occurred of interest after, mother and child did very well.

Now for the application of this case: suppose an unmarried woman, under similar circumstances, going to a privy; she may have concealed her pregnancy so far, perhaps intended making arrangements, and disclosing her state within the next month; the child is expelled, suffocated. As her state was unknown hitherto, she keeps the occurrence a secret, hoping the body may not be discovered. It is found; she is suspected, examined, and found to have lately been delivered. In such a case, the knowledge of what I now report ought to have some influence, and I think will justify me in sending these few remarks.

I am, &c.

MATTHEW JENNETTE.

Surgeon to Police Force, Consulting-surgeon to Birkenhead Hospital, &c.

Birkenhead, March 25th, 1857.

OBSTRUCTION OF THE BOWELS FROM RETENTION OF THE MENSES.

[To the Editor of the Medical Times and Gazette.]

In your last number you extract from the *Bull. de la Soc. Anat.*, a very interesting case of Fatal Retention of the

Menses, which occurred at the *Hôpital des Cliniques*. A case which recently occurred in my own practice may be acceptable to your readers. In September, 1856, I was called to a young female of respectable family. She was seventeen years of age, short stature, plethoric habit, and the *mammæ* well developed. For two years she had had obstinate constipation and pains recurring every month, but had never menstruated. Her bowels had been confined four or five days, though she had taken castor oil, senna and salts, etc., and her family was now alarmed at the appearance of a rounded tumour about the navel, which they thought was hernia, but she had no pain in the part. On examination I found this to arise from accumulation of *fæces* in the transverse colon, and the descending colon was also distended with *fæces*, whilst the ascending colon was tympanitic. By warm fomentations, purgatives, and enemata, a large mass of *fæces* was evacuated, and she was apparently quite well again. A month afterwards she had similar symptoms, which were again relieved, and she was directed to take castor oil every second morning. Another month elapsed, when I was sent for in haste to relieve retention of urine. The bowels had been kept open by the castor oil till within the previous three days. On attempting to pass the catheter I could not find the orifice of the urethra, but found a rounded tumour, as large as an apple, obstructing the entrance of the vagina. Explaining to the mother that there must be some malformation of the parts, I proceeded to a more minute examination. The orifice of the urethra was dragged an inch from the pubes—the labia had their natural formation, but the entrance of the vagina was closed by a thick fleshy membrane, distended by liquid in the vagina. I first introduced the catheter, to be certain there was no malformation of the bladder, when, with some difficulty, the instrument glided behind the pubes, and no urine flowed till the catheter had passed three inches, and then about four ounces were drawn. I next examined by the anus, and found the rectum flattened by a large swelling within the vagina, which explained the cause of the previous constipation. I then made an incision of half-an-inch through the false membrane, when a quantity of thick, dark, ropy menses poured out. I pressed above the pubes to assist the evacuation. About twenty ounces were discharged immediately, and ten ounces more when she sat up. This gave immediate relief. I could not reach the os uteri, but the vagina was detached from one side of the pelvis to the other. At my next visit, I cut the membrane from the urethra to the fourchette, when the urethra was drawn to its natural position, and the folds of the membrane retracted to the walls of the vagina, and the parts presented a natural appearance. She has since menstruated, and enjoys good health, and has no occasion for purgatives. As I found traces of the hymen in their natural position, I am led to suppose that there was no malformation of the parts, but adhesion of the opposite sides of the vagina—congenital or occurring in infancy. As there was some discharge for two or three days after the operation, evidently from the uterus, I conclude both the uterus and vagina were dilated. At least a quart of menses must have been retained, and accumulating for two years.

I am, &c.

L. D. LEES, M.D., F.R.C.P. Edin.

Ashton-under-Lyne,
Feb. 2, 1857.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 24, 1857.

Dr. Locock, President, in the chair.

A PAPER by Mr. Brodhurst was read,

ON FORCIBLE EXTENSION AND RUPTURE OF THE UNITING MEDIUM OF PARTIALLY ANCHYLOSED SURFACES.

The author commenced by stating that excision of the articular surfaces of bones is at the present time an operation of frequent occurrence, and that it is undertaken not as a substitute merely for amputation, but that this operation is per-

formed in cases where amputation would not be thought of, and where forcible rupture of partially ankylosed surfaces would be advantageously had recourse to. He related three cases of partial ankylosis of the knee, in which the adhesions were ruptured, and motion was restored. He also cited three similar cases in which the articular extremities of the bones were excised, and related four cases of partial ankylosis of the hip, and one case of partial ankylosis of the elbow; in all of which rupture of the uniting membrane was successfully performed. The author then gave a brief historical sketch of the operation, to show the means which have been hitherto adopted in the treatment of these cases, and to contrast them with those which he has practised and which he recommends; and concluded with some details as to the after-treatment adopted by himself. The cases related were—

1. A youth, aged 14, with partial ankylosis of the knee at a right angle, together with sub-luxation of the tibia backwards, of nine years' duration.

2. A female, aged 42, with angular false ankylosis of the knee, together with sub-luxation of the tibia backwards, of ten years' duration.

3. A female, aged 17, with angular false ankylosis of the knee, which had existed one year.

4. A female, aged 8, with angular false ankylosis of the hip-joint, of three years' duration.

5. A female, aged 13, with false ankylosis of the hip, of four months' duration.

6. An artillery officer, aged 25, with false ankylosis of the hip-joint, of fourteen months' duration.

7. A gentleman, aged 21, with partial ankylosis of the hip-joint, of twelve years' duration.

8. A boy, aged 8, with angular false ankylosis of the right elbow, of five years' duration.

The author stated that in no instance did inflammation occur; and also that in all these cases motion was obtained. In some, complete power of motion in from six weeks to three months; in others, less-extended motion. He concluded that fibrous adhesions may safely be ruptured when they have formed between articular surfaces. And he recommended that when muscular retraction exists, and there is much rigidity present, the tendons should first be divided, and subsequently the adhesions should be ruptured, when the punctures have healed.

Mr. URE said that Professor Langenbeck laid great stress upon the reduction of the tonic contraction of the muscles by chloroform, rarely resorting to subcutaneous section, except in the cases to which Mr. Brodhurst has referred where fasciæ or cicatrices interfered. In his memoir, Langenbeck mentioned six cases of ankylosis overcome by his method, five of the knee-joint, and one of the hip-joint,—the ages varying from 4 or 5 to 35 years. In some cases, the patients walked about in a fortnight or three weeks after the rupture by alternate flexion and extension of the diseased articulations. Very little after-treatment was found necessary, simply a small dose of morphia, and occasionally iced applications; in one or two cases leeches were applied, and venesection was resorted to in one instance. He (Mr. Ure) had adopted Langenbeck's plan in the case of a little girl in St. Mary's Hospital, who suffered from contraction of the knee-joint, and a great improvement was the result.

Mr. HENRY LEE said, the author had described the advantage of subcutaneous section of the tendons and fasciæ in cases of partial ankylosis. In those cases there must be some effusion of matter, more or less solid, into the joint; and where that was the case, it must be apparent, if the ligaments were left entire, that any forcible extension of the joint must not only lacerate, but occasionally bruise and crush the ligaments. The surfaces of the articular cartilage must be altered in their outline; so that it might be impossible for a semi-ankylosed joint, even if the adhesions were free, to be moved. In cases where inflammation affected the ligaments without any alteration of the articular cartilages, it was often impossible fully to extend or flex the joint, on account of the alteration that had taken place in the ligaments themselves. He wished to ask Mr. Brodhurst whether he had tried the plan of dividing the ligaments. It appeared to him (Mr. Lee) that, if the ligaments could be subcutaneously divided, the joint might be extended with much less force and injury to the parts, and very much less chance of inflammation. It might be said that there would be a chance of opening the joint; but, if that were so, the opening of a joint under such altered circum-

stances would be nothing in comparison to the opening of a sound joint.

Mr. COULSON regretted that the author had not mentioned somewhat more in detail the pathological conditions under which the system recommended by him should be practised. He thought it might be applicable to the knee-joint, in cases where there was little or no destruction of bone, and the contraction of the muscles had a great deal to do with the displacement, and the limb was useless. But he did not think the method applicable in cases of diseased hip-joint, in which muscular contraction had little or nothing to do with deformity, and there was a considerable destruction of bone: in such cases ankylosis was the natural cure, and the joint was as useful as could be expected after a disease of the kind. Under such a condition, by applying the plan of extension, as recommended, one would probably set up a disease again which had just terminated by a spontaneous cure.

Mr. CHARLES HAWKINS asked the author whether the cases he had enumerated included all that he had met with in his practice, or whether he had had cases which had not terminated so successfully. He (Mr. Hawkins) should be very much disinclined to interfere with a well ankylosed joint, especially the hip-joint, where extensive disease had existed. The cases related by the author certainly appeared to be extraordinarily successful, but he should be glad to know whether there was any return of the disease, or whether in any cases matters had been left worse than before. He had seen great improvement in the shape of extremely distorted joints by properly applied instruments, without rupturing or dividing the tendons.

Dr. WOOD bore testimony, from personal observation, to the very successful termination of the case of the officer of artillery mentioned by the author.

Mr. SPENCER WELLS said he had seen Langenbeck's practice in Berlin in 1853, and could testify to the groundlessness of the fears expressed by Mr. Hawkins as to the after results of the system. He saw six cases in which the operation was performed—two upon the elbow-joint after a fracture of the internal condyle of the humerus, one or two upon the hip-joint, two or three upon the knee-joint, and in no case did a bad symptom present itself. The patients were fully under the influence of chloroform, and one of them was operated on a second time. The success of the operation had encouraged him to perform it himself in a case in which the internal condyle of the humerus had been fractured; the limb had been firmly flexed upon the arm, but it yielded to extension, and motion was re-established without any ill effect.

Mr. HUTCHINSON said he could confirm the statement that had been made as to the comparatively small amount of danger attending the breaking down adhesions of the joints. It was a frequent operation in the large hospitals. In one or two cases only had he seen it set up any considerable amount of inflammation. He could not express a positive opinion as to whether the plan recommended possessed any material advantage over that adopted at the Orthopædic Hospital, of dividing the tendons and extending gradually by an apparatus; but he should rather incline to the latter method in treating a case of his own. He was surprised to hear the author referring to excision in some of his cases, in none of which would such an operation have ever suggested itself to him (Mr. Hutchinson), an operation that should be only undertaken as an alternative to amputation when active disease was going on.

Mr. BRODHURST said that on a recent occasion at Vienna, a paper was read by Pellissiano on partially ankylosed joints. A discussion followed, which was stopped by the President (Dumreicher) observing, that the question had been already settled; the division of tendons being considered in Germany unnecessary, forcible extension without such division being all that was required. It was in consequence of that statement that he (Mr. Brodhurst) had brought the subject before the Society. It appeared to him that the President had prejudged the question, and that (judging from the cases of Langenbeck and Louvrier) the tendons ought to be divided where great rigidity existed, though in other cases, such as those to which he had referred, the division was not necessary. He had seen no evil results from extension, except in one case in which a troublesome inflammation was set up, but it was overcome, and motion was subsequently gained. It was true, as Mr. Lee had observed, that the structure of the joint was changed in such cases; but he had not found it necessary to divide the ligaments. Indeed he should hesitate

to extend the limb immediately after having used the knife. That, he believed, had been the great fault committed in the operation, leading to inflammation, abscess, and other untoward symptoms. He had not had more than fourteen cases, all of which had turned out extremely well. It was difficult to lay down the pathological conditions, as required by Mr. Coulson, since they differed so extremely. In some cases the adhesions were within the joint, and in others they were external. The cases in which the joint was not immediately implicated, were of course the most favourable for the operation. In one of his cases resection had been proposed, and it was only because such a violent operation had been suggested that the patient was sent to him (Mr. Brodhurst).

The Society then adjourned.

HARVEIAN SOCIETY.

FEBRUARY 19.

Dr. CAMPS, Vice-President, in the chair.

Mr. WEEDEN COOKE read a paper on

THE CONSTITUTIONAL ORIGIN AND TREATMENT OF CANCER.

The author had begun the study and treatment of this disease at the Cancer Hospital on the principle of local eradication by operation, but some years of observation upon upwards of a thousand cases have gradually forced upon him the conviction, that the whole system must be the first, as it is the most difficult point of attack—the local disease being comparatively easy of management. As to hereditary predisposition, Velpeau says 1 in 3 have this predisposition. At the Cancer Hospital it has only been noted in 1 in 6, and by Lebert in 1 in 12 cases. This forms at least a link in the chain of evidence. According to a calculation made by Mr. Cooke, in upwards of 1000 cases, the average age is 43½ years. At the Cancer Hospital the female patients are as 6 to 1 male. The effect of depressing moral agents has been noted by most authors, but rejected by some. Sir A. Cooper says, "Three-fourths of these cases arise from grief and anxiety of mind;" and the author's experience confirms this opinion. Material alterations in the blood are brought about under these circumstances. Atrophy of the red corpuscles and increase of the colourless globules may be observed, and thus the creative power of the blood is deteriorated, and the tissues which this ill-elaborated fluid forms show that defective organisation which is seen in cancer. Whether the defect be a process of exudation or of impaired nutrition is a speculation difficult of solution, but Mr. Cooke leans to the idea of deranged nutrition or degeneration of the tissues, similar to the fatty degeneration now so fully recognised. In a very large number of cases there is a period when the cancerous tumour ceases to increase, begins to diminish and gradually to waste away, so that the prolongation of life is not in any way affected by the patient having been subject to this malady. The spontaneous cure of the disease has been noticed by Velpeau as well as Sir A. Cooper and other authors, and several cases were recited from among the patients at the Cancer Hospital. Of all the medicaments which experience or theory has shown to influence this disease, iron, in its various forms, is capable of effecting the largest amount of benefit. In order to obtain this good in various constitutions it is necessary to vary the form of its administration, and then to alternate this tonic with others. The mineral acids are most valuable, either alone or in combination with other drugs. Lemon juice and sarsaparilla, in delicate people, is a most excellent appetizer. Bark, in the form of the compound tincture, is largely used with the greatest benefit at the Cancer Hospital; and cod-liver oil as an adjuvant to the other remedies is serviceable. Diet and moral management are of the utmost moment in the conduct of these cases. The system requires to be well nourished, and somewhat stimulated. Good meat, good beer, and a fair supply of good vegetables, putting aside the nonsense of sloppy soups and leucophlegmatic fish, to waste the appetite and distend the stomach; and wine may be taken according to advice. The treatment of the mind is not less important, and if we could eradicate the idea of the incurability of cancer we should do much towards its cure. Hope would assist our efforts at

restoration more perhaps than any physical agent. The diversion of the mind from the contemplation of the malady by the influence of genial society, by the cultivation of literature and science, and by change of scene in travel, have tended to the production of that atrophy of the disease which is in fact its cure. As to the local treatment of cancerous tumours, it appears from the statistics at the Cancer Hospital that 128 persons have presented themselves who had been operated on previous to coming to the hospital, and that the average lapse of time before the return of the disease in these cases was eighteen months. From this it may be assumed with tolerable justice, that operations do not generally cure the disease. There are, however, some cases in which removal of the local malady is desirable, as tending to prolong life or remove unsightliness. One is, that of the advanced hæmorrhagic stage of cancer, and the other condition is when epithelial cancer attacks any exposed part, such as the lips, face, or extremities. The method of removal in either of these cases should be by the knife, under the influence of chloroform. As to the revival of the treatment by caustics, says Mr. W. Cooke, "now that we have the invaluable assistance of chloroform, I cannot imagine how such a necessarily prolonged and painful procedure can be recommended by the Profession, or tolerated by any patient who has the power to select the least of two evils. The knife can do without pain in as many minutes all that the caustic can do with pain of no ordinary character in as many days." These two agents, however, in the local treatment of cancer, are of infinitely less importance than those which assist in the induction of that atrophy of the tumour which nature brings about in many cases, and which art may assist in promoting in many more. Of all the detergent remedies, lead, in its various pharmacopœial forms, is the most efficacious. The liquor plumbi, alone or diluted; the ceratum plumbi and the ceratum saponis, which contains lead; the unguentum plumbi iodidi, and the emplastrum plumbi, with or without soap or adhesive plaster, are all, at different stages of the disease, most invaluable adjuvants to the general constitutional treatment. It would be tiresome to enter into details of special applications for particular parts of the system, such as the chlorate of potash and hydrochloric acid lotion, and carrot poultice to the ulcerated or sloughing breast; the borax lotion, and the application of the nitric acid or sulphate of copper to the tongue, etc. These are matters which practice teaches, and which may sometimes perhaps be varied with advantage according to the taste or fancy of the surgeon, provided that the great principle be at all times kept in view, namely, that local treatment in cancer, whether by the knife or caustic, or detergent applications, is and must be second in importance to the general upholding of the constitutional powers.

An interesting discussion ensued, supported by Dr. Theophilus Thompson, Mr. Burford Norman, Dr. Vernon, Dr. Hutchinson Powell, Dr. John Gray, and Dr. Camps.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 27th inst. :—

BEER, JAMES J., Deal.
BLACKALL, JOHN GEORGE, Exeter.
CROOME, W., Army.
GOODALL, RALPH, Seabridge, Newcastle, Staffordshire.
JONES, THOMAS, Pencoyd, Herefordshire.
KNAGGS, HENRY, Huddersfield.
REES, HUGH, Carnarvon.
SPRAKELING, ROBERT JOHN, Canterbury.
TATHAM, JOHN, Burton-in-Lonsdale, Yorkshire.
WALLIS, GEORGE, Cambridge.
WHITEFIELD, ARTHUR, Barnstaple, Devon.

The following gentlemen were admitted members on the 30th inst. :—

BAKER, WILLIAM LANGWORTHY, Newton Abbot, Devon.
BARNES, JAMES HINDMARSH, Westminster Ophthalmic Hospital.
BARRIE, ARTHUR ARDAGH, Canada West.
BLUCKE, ROBERT DANIEL, Brighton.

BULLMORE, WILLIAM KING, Falmouth.
HETHERINGTON, JOSEPH, Lamplugh-hall, Cumberland.
LITTLEWOOD, JOSEPH, Hampole, Doncaster.
WARD, ISAAC DUNLIN, Clifton, near York.

DEATHS.

BALL ROBERT, ESQ., LL.D., AND JOHN MITCHELL KEMBLE, M.A.—Scientific society in Dublin has experienced a serious loss in the death, after a very short illness, of Dr. Robert Ball, which took place on the evening of Monday, the 30th of March, at his residence in Granby-row. Dr. Ball was, for many years, curator of the museum in the University of Dublin, and had received from the University, as a mark of appreciation of his services, the honorary degree of LL.D. He was also secretary to the Queen's University in Ireland, and was one of the secretaries of the Zoological Society, in the welfare of which latter national institution he took an active and anxious interest. Dr. Ball was connected with most of the scientific and literary institutions in Dublin, and was esteemed and respected amongst the scientific men of all classes for his high attainments, and for the uprightness of his character. But a few days have elapsed since death had removed a scientific visitant to the Irish metropolis, John Mitchell Kemble, M.A., eldest son of the late Mr. Charles Kemble. This eminent scholar and archæologist had repaired, some weeks ago, to Dublin, to collect specimens of Celtic and Anglo-Saxon antiquities for the Art Treasure Exhibition at Manchester, and was attacked, about a fortnight before his death, with an inflammatory affection of the lungs, under which he sunk on the 26th of March.

COOKE.—March 21, at Oaklands, East Tytherly, Hants, William Cooke, M.D., F.R.C.S., aged 80, formerly of Durham.

DAVIES.—Recently, at Coleshill, Warwickshire, of pneumonia, aged 41, John Davies, Esq., Surgeon, deeply lamented. M.R.C.S.E. 1853; L.S.A. 1840.

JOSEPH.—March 7, aged 52, E. Joseph, Esq., Surgeon, of Manchester-street. M.R.C.S.E. 1832; L.S.A. 1832.

KELLY.—March 26, deeply regretted by all who knew him, Thomas Knox Kelly, Esq., surgeon, of Addington-place, Camberwell. M.R.C.S.E., 1840; L.S.A., 1848; L.M., Dublin, surgeon to St. George's District, Camberwell.

MONAHAN.—March 18, at Lower Gardiner-street, Dublin, Thomas L. Monahan, Esq., M.D.

NICHOLSON.—March 15, at Redhill, Surrey, Dr. Brinsley William Hewitson Nicholson, F.R.C.S., Deputy Inspector General of Hospitals, in his 69th year.

RADNOR.—March 16, at Dresden, deeply lamented, William Radnor, Esq., Surgeon, late of Surrey-street, Strand, and Herne Bay, Kent.

SIMPSON.—March 31, at Stamford, Charles Simpson, Esq., Surgeon, aged 45. M.R.C.S.E. 1838, L.S.A. 1838: one of the Surgeons to the Stamford and Rutland Infirmary; Medical Officer of the Borough Goal, and two Districts of Stamford Union.

TESTIMONIAL.

A very gratifying mark of the regard entertained for a gentleman who, until recently, was one of our townsmen, has come to our knowledge. Henry Norris, Esq., F.R.C.S., has lately left South Petherton, after having practised there as a surgeon for upwards of forty years. His friends were anxious that he should, on leaving, carry with him an earnest of their kindly feeling towards him, and they accordingly presented him with a purse of 190 sovereigns and a chaste silver inkstand, bearing the following inscription :— "Presented to Henry Norris, Esquire, F.R.C.S., on his change of residence from South Petherton to Charmouth, as a slight expression of the esteem which his worth as a gentleman and his skill as a surgeon have always commanded throughout the large circle of his friends."

APPOINTMENTS.

WESTMINSTER HOSPITAL.—Dr. Hamilton Roe having resigned his office as Physician to the Westminster Hospital, Dr. Radcliffe becomes Physician; and there is a vacancy for an Assistant Physician. Dr. J. Russell Reynolds is a candidate.

Dr. FULLER has been appointed Physician, and D. OGLE, Assistant Physician to St. George's Hospital.

PRIZES OF £50 and £20 respectively have been placed in the hands of the Council of the Society of Arts by Sir W. C. Trevelyan, Bart., to be awarded for "The two best and approved Essays on the applications of the Marine Algae and their products, as food or medicine for man and domestic animals."

CHOLERA is on the decrease in Demerara, but in some districts in the country the mortality continues to be large.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—The following gentlemen will be ballotted for at the meeting on the 14th of April:—Archibald Douglas; George Harley; Edward Charles Hulme; John Morgan; George Owen Rees; Henry Thompson; and Hermann Weber.

POOR-LAW MEDICAL REFORM.—A deputation from the York branch of the Poor-law Medical Reform Association waited upon the Parliamentary candidates, Colonel Smyth and Mr. Westhead, on Wednesday the 25th instant, for the purpose of urging upon them the claims of Poor-law Medical Reform, and in the event of their election enlisting their interest in its behalf in the new Parliament. A patient hearing was given to the gentlemen composing the deputation, the necessity for Poor-law Medical Reform willingly allowed, and support promised to such measures as would be thought most likely to advance it.—FREDERICK NEEDHAM, Honorary Secretary.

BIRTHS, MARRIAGES, AND DEATHS IN SCOTLAND DURING 1856.—During the year 1856, there were registered in Scotland 101,748 births, 58,456 deaths, and 20,487 marriages. Allowing for increase of population, this gives the proportion of 1 birth in every 29, 1 death in every 52, and one marriage in every 148 persons living in Scotland during the year. 101,748 births were registered in Scotland during the year 1856. This gives the high proportion of 1 birth to every 29 of the population. The greatest number of births is registered during the second quarter of the year, and the fewest during the third quarter. Of the 101,748 children born during the year, 52,301 were males, and 49,447 females; being in the proportion of 100 males to every 94½ females. The proportion of births was highest in Lanark, being at the rate of 417 in every 10,000 of the estimated population; and the proportion was lowest in Sutherland, the births being only at the rate of 231 in every 10,000. The difference between the birth-rate in the town and rural districts was not less remarkable. It appears that the births in the town districts were in the proportion of 394 to every 10,000 or 1 birth to every 25 persons; while in the rural districts there were only 309 births to every 10,000, or 1 birth to every 32 persons. 58,456 deaths were registered during the year 1856, being in the proportion of 192 deaths in every 10,000, or 1 death in every 52 persons. The mortality during the past year exhibits a decrease below that of 1855 to the extent of 3797. This circumstance exhibits, in a striking light, the general healthiness of the population during the year; and as sanitary arrangements, which are still miserably deficient over the country, and far too partial to influence materially the general mortality, other agencies must be considered as the cause. In all those districts in which large masses of human beings are crowded together, this mean mortality has been exceeded. In the 138 town districts, which include all the populous towns, the deaths during the year amounted to 36,641; while in the 870 rural districts, but with an equal population, the deaths only numbered 21,815, thus showing an excess of 14,826 deaths in the town districts during the year. It may therefore be assumed that improved sanitary arrangements might save annually to Scotland somewhere about 14,000 lives. Of the 58,456 persons who died during the year, 29,417 were males, and 29,039 females. The actual increase of the population of Scotland, during the year, making allowance for emigration, seems to have amounted to 29,968 persons. 20,487 marriages were registered during the year 1856, being in the proportion of 67 marriages to every 10,000, or one marriage in every 148 persons of the estimated population. As the corrected number of marriages for 1855 amounts to 19,690, the marriages of 1856 are 796 greater in number than those of the previous year. The high proportion of births as contrasted with the low proportion of marriages is remark-

able, but the Registrar General at present offers no solution. As to the weather, no great range of mean temperature occurred during the year, and consequently the deaths were neither increased so much by the low temperatures which occurred, nor reduced so much by the milder temperatures, as during the year 1855. The greater dryness of the air during the months of March, April, and May, had, no doubt, much effect in keeping the mortality during these months above what would be due to mean temperature alone; and this is rendered highly probable by the fact that, though the mean temperature of November was almost the same as that of March, the deaths were materially fewer.

A NEW NIGER EXPEDITION.—An expedition under the charge of Dr. W. B. Baikie, surgeon, R.N., has just been sanctioned by the Treasury, and will comprise among its officers Mr. Francis W. Davis, assistant-surgeon. Dr. Baikie proceeds to Sierra Leone by the next African mail, where he will remain until the arrival of a steamer to assist him in his operations. The object of the expedition is to penetrate into the interior of Africa for commercial purposes. Dr. Baikie has been very liberally supplied with various articles for barter, and for presents to the chiefs and natives. The whole of the officers will receive a salary equal to double full pay, in addition to their half-pay, and will be supplied with chronometers, instruments, and books by the Admiralty.

MORTALITY NOTABILIA.—The total number of deaths registered in London in the week that ended on Saturday was 1248. The average number of deaths in the weeks corresponding with last week was 1318. The births registered last week exceed the deaths by 689. Fatal cases of the diseases which form the zymotic class exhibit a decrease from 197 in the preceding week to 187 last week. The corrected average for corresponding weeks is 251. Hooping-cough, as usually happens at this period of the year, is the most fatal of this description of diseases, and numbers 60, the average being 63. Measles, to which 20 cases are referred, is also about the average; whilst scarlatina which caused 20 deaths, typhus and common fever which caused 34, and small-pox which was only fatal to 3 children, are all decidedly below the average.

BIRTHS.—Last week the births of 990 boys and 947 girls. The average number was 1700.

METEOROLOGY.—At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29.625 in. The highest reading in the week occurred on Friday, and was 29.90 in. The mean temperature of the week was 39.6°, which is 2.6° below the average of the same week in 43 years.

THE following are the number of Deaths from Small-pox, Measles, Scarlatina, Hooping-cough, Diarrhoea, and Typhus, in the several Districts of London, for the past Week:—

	Popula- tion.	Small- pox.	Measles.	Scar- latina.	Hoop- ing- Cough.	Dia- rrhoea.	Ty- phus.
West.....	376,427	..	5	6	12	1	7
North....	490,396	1	4	3	9	..	9
Central ..	393,256	2	4	1	12	1	4
East.....	485,522	..	4	6	12	3	9
South	616,635	..	3	4	15	4	5
Total..	2,362,236	3	20	20	60	9	34

DEATHS IN PUBLIC INSTITUTIONS for the Weeks ending Saturday, March 21, and March 28:—

	In the Week ending Mar. 21.			In the Week ending Mar. 28.		
	Males.	Females.	Total.	Males.	Females.	Total.
Workhouses..	46	51	97	65	66	131
Prisons ..	2	1	3	2	..	2
Military and Naval Asylums ..	5	..	5	9	..	9
General Hospitals ..	27	18	45	34	21	55
Hospitals for Special Diseases ..	7	3	10	1	..	1
Lying-in Hospitals ..	1	..	1	1	..	1
Military and Navy Hospitals ..	6	..	6	2	..	2
Hospitals and Asylums for For- eigners ..	..	2	2	2	..	2
Lunatic Asylums ..	5	2	7	1	2	3
	99	77	176	117	89	206

DEATHS REGISTERED in the Metropolis for the Week ending Saturday, March 28, 1857.

CAUSES OF DEATH.	In the Week ending Saturday, Mar. 28, 1857.							Averages of Temperature and Deaths in 10 Weeks.
	Deaths of Persons.							
	AT ALL AGES.	Under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.	At 80 Years of Age and Upwards.		
Mean temp.	39° 6							42° 0
Mean Temperature								
ALL CAUSES	1248	619	149	207	226	47		1317.8
SPECIFIED CAUSES	1248	619	149	207	226	47		1311.3
DISEASES:—								
1. Zymotic Class	187	150	15	13	8	1		227.5
2. Dropsy, Cancer, and others of uncertain seat	53	7	5	20	22	4		54.9
3. Tubercular Class	218	94	72	40	12	..		207.1
4. Of Brain, Nerves, etc. ..	121	61	11	20	25	4		148.8
5. Of Heart, etc.	63	9	6	24	22	2		55.2
6. Of Respiratory Organs ..	278	139	21	42	64	12		247.5
7. Of Digestive Organs	81	36	5	17	19	4		68.7
8. Of Kidneys, etc.	16	..	2	7	6	1		12.3
9. Of Uterus; viz.—Puer- peral Disease, etc. ..	11	1	2	6	2	..		11.5
10. Of Joints, Bones; viz.— Rheumatism, etc. ..	6	1	1	2	2	..		9.1
11. Of Skin, etc.	4	2	..	..	2	..		2.3
12. Malformations	8	8	..	..	..	..		3.9
13. Debility from Premature Birth, etc.	25	24	..	..	1	..		31.1
14. Atrophy	26	18	..	1	7	..		30.5
15. Age	38	..	..	..	22	16		50.3
16. Sudden	29	18	2	5	4	..		42.5
17. Violence, Privation, etc. .	79	51	7	10	8	3		108.1
CAUSES NOT SPECIFIED. . .	..	..	..	..	..	..		6.5

TO CORRESPONDENTS.

Juvenis.—The classical subjects for the Matriculation examination at the University of London, in July next, are the 21st Book of Livy and the Agesilaus of Xenophon.

A Beginner.—Flügel's Dictionary may be safely recommended for the purpose.

An Elector.—We cannot join in your feeling of regret at the defeat of Dr. Michell. On the contrary, we believe that his absence from Parliament is a great gain to the Medical Profession.

Inquisitive.—The appointments in question, although nominally made by the Lord-Chancellor, are generally supposed to be influenced by a well-known nobleman, who takes considerable interest in the class of cases to which our Correspondent alludes.

Οφθαλμος.—The sulphate of atropia is preferred to atropia itself, on account of the greater solubility of the sulphate.

Mr. Bartlett.—The work is out of print, and we have not heard when it is probable that a new edition will appear.

Mr. R. T., Liverpool.—A knowledge of Botany and Zoology is absolutely necessary to candidates for the appointment of Assistant-Surgeons in the East India Company's service. At present, however, only a general acquaintance with these subjects is required, although those who distinguish themselves in such knowledge will find it ultimately advantageous to their interests.

GRIMBLY V. CHESTERMAN AND CAPARN.

We have received two long letters from Mr. Chesterman and Dr. Caparn, justifying their conduct with regard to the Banbury Union, noticed in our columns last week. We have not space for these letters, but may state that their purport is, that Mr. Grimbly did not resign on account of the salary, but because he had been insulted by the Board; and that Dr. Caparn considered himself justified in applying for the vacant office when Mr. Grimbly avowed that he would not accept it again unless the salary was increased.

A Subscriber.—Thanks. The note arrived too late for last week. Our Dublin Correspondent, however, had noticed Mr. Napier's address.

Mr. Reynolds can obtain all the particulars he desires by writing to Mr. Balfour at the College of Surgeons.

Pilus.—Of any druggist.

Civitas.—England's is the most suitable truss for such a case as that of our Correspondent's patient.

M. Guerritore's request, that we should "honour the author" of the Prophylactic and Curative Sirop, is really amusing.

Mr. Brown's paper shall appear.

Lectures, Papers, and Letters are in type from Professor Huxley, Dr. Priestley, Dr. Aitken, Mr. Adams of Dublin, Mr. Statter, Liverpool, Dr. Edward Smith, Medieus, etc. Many communications are delayed unavoidably.

Fiat Justitia.—A Correspondent, under this signature, writes to us to inform him of the nature and character of the present examinations at Apothecaries' Hall, and complains that an individual residing in his locality has suddenly obtained the licence of the Hall, without any previous preparation. The individual in question is stated by our Correspondent to be advanced in years, and to have practised for many years without the Licence. We find, upon inquiry, that the Court of Examiners of the Apothecaries' Society have, with the sanction of the Court of Assistants, instituted, of late years, a modified examination in favour of those who, though duly educated in the science of the Profession, have, from pecuniary or other causes, been unable to obtain the licence at an early period of their lives. The minimum age at which this modified examination can be passed is forty; and we understand that a printed description of the mode of examination to which the candidates, under such circumstances, are subjected, is to be obtained at the Hall.

FOX V. TAYLOR.

Mr. Fox has written us a long letter on this case, which was alluded to in our Number for January 17, 1857. Mr. Taylor having accepted the office vacated by Mr. Fox on account of insufficient salary. It appears from Mr. Fox's letter that the matter was referred to the Southampton Medical Society, which first came to a resolution so condemnatory of Mr. Taylor that it was considered libellous, but on reconsideration arrived at the following verdict:—"The Medical Society having maturely considered the circumstances connected with the resignation by Mr. Fox of the appointment of Medical officer of the Mottisfont District, and the acceptance of the offer by Mr. Taylor, cannot but express their regret that Mr. Taylor did not communicate with Mr. Fox prior to accepting the office, and would urge on both gentlemen that it will be the wisest and kindest course to take no further proceedings in a matter which may lead to much unpleasant controversy and very painful results." Mr. Fox now demands that the Society should explain on what grounds the amended verdict was arrived at.

An Old Friend.—The gossip about the deceased lady in Edinburgh reminds one of the School for Scandal. The lady died of convulsions connected with albuminuria. The convulsions did not come on until two or three hours after delivery. There was no hæmorrhage. She took no unusual quantity of chloroform; and Professor Simpson in a letter to us says, "I believe the convulsions would have come on during labour, if she had not used chloroform, for as is now well known and acknowledged by most accoucheurs, chloroform keeps them in abeyance, and in her they did not supervene till the action of the chloroform was abated or terminated."

COMMUNICATIONS received from—

Mr. ADAMS, Dublin; Dr. HOOD; Dr. WEBSTER; Dr. COSTELLO; M. BROCA; Dr. SNOW; Mr. TOYNBEE; Mr. HUXLEY; Dr. TILT; Dr. MACLEOD; Dr. PRIESTLEY; Dr. BIRCH; Mr. MOREHEAD; Mr. PEARSON; Dr. GORE; Mr. GLAISHER; Mr. WOOLCOTT; Mr. S. PARKER; Professor SIMPSON, Edinburgh; Mr. BAKER BROWN; Mr. FOX; Dr. MCWILLIAM; Dr. MOWATT; M. GUERRITORE; Dr. WHITEHEAD; Mr. MORRIS; Mr. E. ATKINSON, Jerusalem; Mr. HERSLET; Mr. PEPPER; Dr. SIEVEKING; Dr. LEE; Dr. O'CONNOR; Mr. NEWHOUSE; ÆSCULAPIUS; SMOKIANUS; A. G.; W. M.; CLERICUS; A PHYSICIAN; CORDUS; Mr. BARTLETT; Mr. REYNOLDS; CIVITAS; PILUS; Mr. FOX; Mr. CHESTERMAN; Dr. CAPARN; AN OLD FRIEND; Mr. H. MARTIN; Mr. McBEAN; Mr. M. ALEXANDER; Mr. D. PARRY; Mr. HAMMOND; Mr. S. H. GREEN; Dr. STOKES; Mr. P. DOWNEY; Dr. T. WEST; Mr. E. B. ADAMS; Dr. J. HUNTER; Mr. N. HUNTER, &c.

APPOINTMENTS FOR THE WEEK.

4. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; Westminster, 1 p.m.; King's, 2 p.m.; Charing Cross, 1 p.m.

ROYAL COLLEGE OF SURGEONS, 4 p.m.: Professor Busk.

MEDICAL SOCIETY OF LONDON, 8 p.m.: Dr. Willshire, "On some Points connected with the Propagation and Treatment of Tania."

ARMY MEDICAL AND SURGICAL SOCIETY, 7½ p.m. Adjourned debate on Staff-Surgeon Matthews's Paper, "On the Cholera Epidemic at Madeira."

ROYAL INSTITUTION, 3 p.m.: Professor Huxley, "On the Principles of Natural History."

6. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.; Orthopædic Hospital, 3 p.m.

EPIDEMIOLOGICAL SOCIETY, 8 p.m.: J. N. Radcliffe, Esq., late of the Ottoman Medical Staff, "On Fever and Scurvy in the Turkish Fleet."

ROYAL INSTITUTION, 2 p.m. General Monthly Meeting.

ENTOMOLOGICAL SOCIETY, 8 p.m.

CHEMICAL SOCIETY, 8 p.m.

7. Tuesday.

Operations at Guy's, 1 p.m.

ROYAL COLLEGE OF SURGEONS, 4 p.m.: Professor Quekett.

PATHOLOGICAL SOCIETY OF LONDON, 8 p.m.

LINNÆAN SOCIETY, 8 p.m.

8. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 3 p.m.

NORTH LONDON MEDICAL SOCIETY, 8 p.m.

GEOLOGICAL SOCIETY OF LONDON, 8 p.m.

9. Thursday.

Operations at St. George's, 1 p.m.; Middlesex, 12½ p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.

ROYAL COLLEGE OF SURGEONS, 4 p.m.: Professor Quekett.

10. Friday (Good Friday).

ORIGINAL LECTURES.

LECTURES

ON

GENERAL NATURAL HISTORY.

By THOMAS H. HUXLEY, F.R.S.,

Lecturer on General Natural History at the Government School of Mines and Fullerton Professor of Physiology, Royal Institution.

LECTURE X.

(Concluded from page 185.)

THE spermatozoa, like those of many other Crustacea, are motionless, and have the form of cells, provided with an endoplast and produced into a number of delicate radiating processes. They are united in their course down the vas deferens into cylindrical masses, which becoming invested by a fine membranous coat, probably secreted by the walls of that duct, constitute the spermatophores, which may not unfrequently be found adhering to different parts of the body, not only of female but of male *Astaci*.

The ova are fecundated while still within the parent; they become surrounded in their passage down the oviduct, by a coat corresponding with that of the spermatophore, which is produced into a pedicle whose extremity becomes attached to one or other of the abdominal appendages. Great numbers of ova, attached in this way, may be observed during the breeding season, within the chambers formed by the flexure of the abdomen upon itself; and it is in this cavity that the embryos pass through the whole of their foetal existence.

The nervous system of *Astacus* is composed of thirteen principal ganglionic masses, of which one, cerebral, lies in the head, in front of the mouth; six, thoracic, are situated in the sternal canal; and six, abdominal, lie in the median sternal region of the six anterior somites of the abdomen.

The cerebral ganglia give off nerves to the eyes and to the muscles of the ophthalmic appendages; to the antennules and the auditory organs which they contain; to the antennæ and the sac of the antennary gland; to the carapace in front of the cervical suture; and finally they send posteriorly two long and stout commissural cords to the anterior thoracic ganglionic mass. These commissures are connected by a transverse cord immediately behind the œsophagus (*c*, fig. 5). The size and form of the anterior thoracic ganglion would lead to a suspicion of the complex nature which development shows it to possess (*infra*). It supplies the somites and their appendages from the fourth to the ninth inclusively, and sends forwards delicate filaments to the œsophagus.

Posteriorly it is connected with the ganglionic nerves of the tenth somites by two commissures, and the other thoracic ganglia are similarly brought into communication, the commissures of the ultimate and penultimate only being remarkable for their brevity. The abdominal ganglia, which are much smaller than the thoracic, are united by single cords, which represent coalesced double commissures. Each of these

ganglia supplies the muscles and the appendages of the somite to which it belongs, and the posterior abdominal ganglion sends branches into the telson.

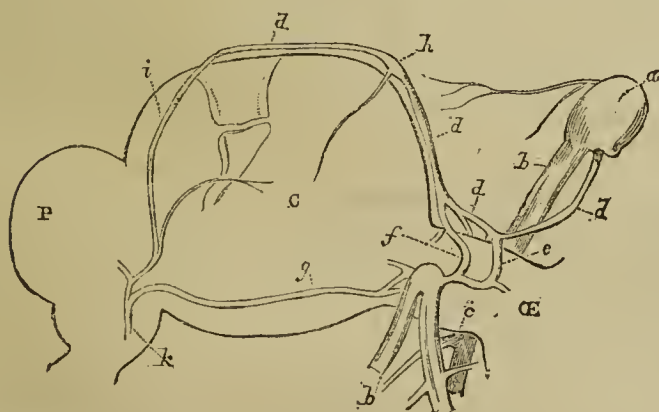
The Cray-fish possesses a remarkably well-developed system of visceral nerves, which has been the subject of special study by Brandt, Milne-Edwards, Krohn and Schlemm, each of whom has described a larger or smaller portion of the system with accuracy, but has omitted, or denied the existence of, some other part. Each of the great commissures, as it passes over the sides of the œsophagus, becomes slightly swollen, and from the enlargement four nerves arise; one, external, passes towards the mandibular muscles, a second postero-lateral branch (*g*, fig. 5) runs upwards and backwards to the inferolateral regions of the stomach, and eventually enters into the composition of the hepatic nerve; a third branch (*f*) passes directly inwards and upwards, and unites upon the œsophagus with its fellow and with an azygos nerve (*d*) which passes up in the middle line of the anterior face of the œsophagus and stomach, and enters a ganglion placed between the anterior gastric muscles (*h*), from whence a lateral branch is given off on each side, while a posterior median branch continues the direction of the azygos nerve.

Having reached the cardiac ossicle this nerve divides into two branches (*i*), each of which passes downwards and outwards, unites with the posterior nerve of its side, and thus forms the hepatic nerve (*k*). The fourth and last, or antero-lateral branch (*e*) descends at first to near the mouth, and then curving backwards, ascends to unite on the anterior face of the œsophagus with the anterior continuation of the azygos nerve which passes forwards and upwards and enters the cerebral mass. I am inclined to think that this part of the azygos nerve forms a portion of a fine plexus of nervous filaments which pass from the cerebral ganglia backwards to the lining membrane of the carapace, but the direction of these fine filaments and the demonstration of their continuity is a matter of no ordinary difficulty. The intestine is supplied by two nerves which arise from the last abdominal ganglion, and unite into a single trunk, from which small branches are given off backwards, and two principal ones forwards, which supply the greater part of the intestine. According to Brandt, the genitalia are supplied by branches of the fourth, fifth, and sixth thoracic ganglia.

The only certainly known organs of sense in the *Astacus* are the eyes and the auditory organs. The eyes are seated at the extremities of the ophthalmic peduncles, the integument of whose outer extremity becomes translucent over a reniform space, and constitutes the corneal membrane. There are no crystalline lenses specially developed from the deeper parts of this membrane, but it is divided into a great number of minute quadrilateral facets, each of which corresponds with the base of a quadrilateral pyramid, constituted by a membranous sheath containing the clear vitreous humour, whose filiform apex is prolonged towards the bulbous expansion of the optic nerve. The faces of the pyramids are separated throughout their whole length by a dark pigment, which performs the functions of a choroid, and in immediate contact with the bulb of the optic nerve itself, I find, imbedded in the pigment and taking the same direction as the pyramids and their continuations, a number of minute fusiform bodies of a pinkish colour, and appearing transversely striated, from being apparently divided by regular partitions. How these bodies are related to the pyramids on the one hand, and to the filaments which proceed from the outer bulb on the other, I have not been able satisfactorily to make out, the investigation being very difficult, and requiring far more time than I have as yet been able to devote to it.

The upper face of the trihedral, proximal, and largest joint of the antennule presents an oval space, which at first looks like a mere broad brush of complex hairs attached along a line about one-sixteenth of an inch long, and having their points all directed inwards (E, fig. 6). On cutting these hairs away close to their base, however, it is seen that they cover an aperture, wider above than below, and about one-sixteenth of an inch long. They are attached to the outer lip of this aperture, and some are directed so as to lie within the inner lip, but the majority cover it. A good-sized bristle passes with great ease into this aperture, and if the inner and outer walls of the coxal joint of the antennule be now removed, and the soft parts carefully dissected away (B), the end of the bristle will be seen to have passed into a wide delicate sac about one-twelfth of an inch long, which is attached by a narrower

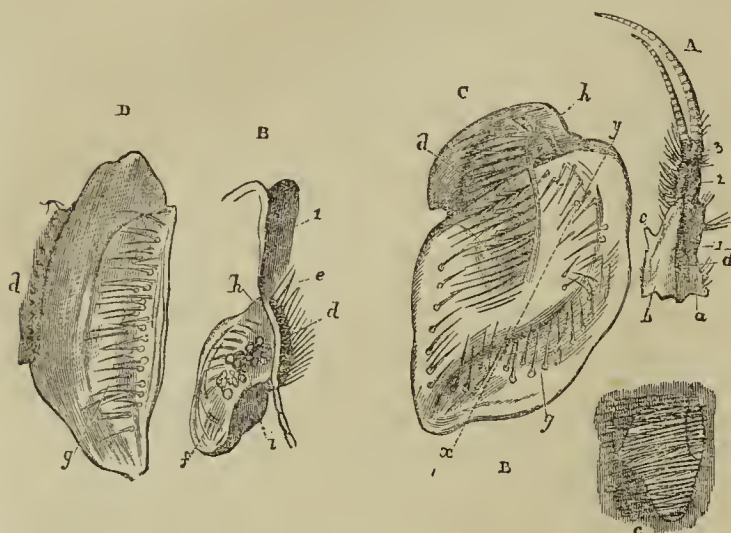
FIG. 5.



Visceral Nerves of *Astacus*.—*a*. Cerebral ganglia. *b*. Commissures. *c*. Transverse cord uniting them behind the œsophagus. *d*, *d*, *d*. Azygos nerve. *h*. Ganglion. *i*. Lateral branch of azygos, uniting with postero-lateral nerve. *g*. *e*. Antero-lateral nerve. *f*. Medio-lateral nerve. *P*. Pyloric. *C*. Cardiac portion of stomach.

neck over the aperture, whose lips are continuous with its walls (C.) The sac is filled with minute sandy particles, suspended in a mucous, dirty-looking fluid, and when emptied of these contents a band, consisting of several lines of very

FIG. 6.



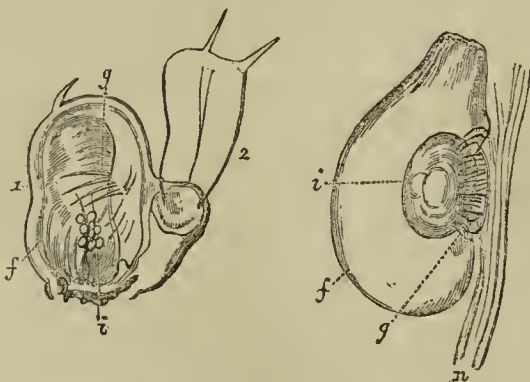
Auditory organ of *Astacus*.—A. Antennule. a. Upper surface. b. Inner surface. c. Aperture of sac. B. Auditory sac viewed laterally. C. From behind. D. Section in the plane *x, y*. E. Aperture covered by hairs. e. g. Band of hairs. h. Neck of sac.

delicate hairs, like those which guard the mouth of the sac, but more delicate, is seen to skirt its inner contour. The hairs projecting inwards come into close contact with the solid particles suspended in the mucous fluid.

A nerve may be traced accompanying the antennular nerve to the sac, and appears to be distributed principally along the setigerous band, so that the extremities of the nerve fibrils come into close relation with the bases of the hairs. Some if not all of the sandy particles are insoluble in strong acetic acid, and would appear to be siliceous.

The merit of the clear recognition of the nature of this apparatus is due to Dr. Arthur Farre, who demonstrated conclusively, as it appears to me, that the organs connected with the external antennæ, and considered by anatomists generally to have an auditory function, are not, and that these are, the true auditory organs in the *Macrura*. In a paper published in the *Annals of Natural History* for 1852, I pointed out how the structure of the corresponding organ in *Leucifer* (already described by Souleyet), and in a caridoid *Macruran* strengthened this view; and Mr. Spence Bate, in a recent essay, has indicated the existence of a similar organ in the antennules of the *Brachyura*. I have not examined the auditory organ in the adults of the latter division with any care, but in a larva in the *Megalopa* stage, I have found an auditory organ, in all essential respects corresponding with that of the *Macrura* (Fig. 7). It seems, therefore,

FIG. 7.



The left-hand figure represents the antennule of a *Brachyuran* larva. The right-hand figure the caudal auditory sac of *Mysis*. Letters as in preceding figure except *n*, nerve.

safe to assume that in the *Podophthalmia* generally the auditory organs are seated in the coxal joints of the antennules, the only known exception to the law at present being found in *Mysis*, in which genus, as Frey and Leuckart rightly state, the auditory organs (Fig. 7) are seated in the endopodite of the sixth abdominal appendage. I have not only verified Frey and Leuckart's description of the auditory sac

in this extraordinary and anomalous position, but I have traced a nerve from the last abdominal ganglion to it (which they failed in doing), and thereby removed all ground for the doubts which have been thrown on their interpretation of this caudal ear.

The apparatus which is commonly regarded as the auditory organ (though Dr. Farre inclines to the belief that it is the organ of some special, perhaps new, sense) lies in the cavity of the thorax, but its aperture is visible on the inner or oral side of a conical prominence, arising from the inferior portion of the coxal joint of the antenna. A bristle passed into this aperture enters a large, but very delicate and transparent sac, filled with a clear fluid, and usually very visible on each side of the stomach when the carapace is carefully removed. A nerve which comes off from the cerebral mass close to the antennary nerve, passes to the neck of this vesicle, and is distributed over its surface between the outer and inner membranes, of which it is composed. Inferiorly the vesicle rests upon a large greenish glandular mass, but is directly connected with it only at two points, by a vascular (?) cord which passes to the central, and usually more yellow portion of the gland, and by a short neck-like continuation of the sac itself, which is attached over a small circular space midway between the centre and the periphery of the gland, and opens into the circular principal duct of the gland; there is, therefore, a free communication between the cavity of the gland and the exterior by means of the sac, which is, in this respect, simply a dilated duct. A section of the gland shows it to be composed of two substances, a central and a cortical. The latter is composed of minute cœca, filled with a homogeneous gelatinous matter, containing many large endoplasts; the former is traversed in all directions by large canals, so as to have a spongy appearance. The cœca open into the ultimate ramifications of the canals, and the spongy, lung-like texture of the central mass seems to arise merely from the very free anastomosis of their larger branches, which eventually enter the circular canal into which the vesicle opens.

There is little in these structural features to suggest an organ of special sensation, but much to show that the green mass is a secreting organ, and that the vesicle acts (whatever other purposes it may subserve) as its duct; and the similarity in the position, structure, and contents of the antennary "gland" in the decapods with those of the "gut-formed organ," described as the "true ovary" by Mr. Darwin, in the Cirripedes, leaves no doubt on my mind that they are homologous organs, and that the sac is the homologue of the "cement duct" in the Cirripedes. Similar antennary glands are stated to exist in the *Cypridæ*, &c.

The development of the Crayfish has been the subject of one of the most beautiful of the many admirable memoirs on development, for which we are indebted to the genius and patience of Rathke. After fecundation a blastodermic membrane arises upon the surface of the yolk, and gradually extending over the whole yolk, becomes thickened at one part, so as to form an oval germinal disk, with a central depression.

This disk next becomes widened and bilobed at its anterior extremity, the lobes being identical (if I may judge from Rathke's description) with the procephalic lobes, to be hereafter described in the embryo of *Mysis*. The edges of the disk are raised into a fold, and within the fold a papilla, the rudiment of the abdomen, and of the greater part, if not the whole, of the thorax, makes its appearance, while anteriorly three pairs of transverse elevations constitute the rudiments of the mandibles, the antennæ, and the antennules. The labrum arises as a median papilla, situated at first between the antennules. The ocular peduncles are next developed in front of the antennules as ridges, which only subsequently become free processes.

The thoraco-abdominal process lengthens, and the anal aperture makes its appearance. It is to be remarked, that the anus is at first situated on the dorsal side of the extremity of the abdomen, and that there is no telson,—this segment being developed only at a much later period from the dorsum of the end of the abdomen, and by its outgrowth forcing the anus to the ventral side.

In the meanwhile, the oral aperture is developed behind the labrum, which moves backwards, and the maxillæ, maxillipedes and ambulatory feet appear in succession as elevations or ridges of the substance of the embryo, which are at first all alike, and gradually become specialized into their ultimate form.

When Rathke first observed these appendages, the maxillæ and first pair of maxillipedes were attached to the embryo, in front of the thoracico-abdominal process, — the second maxillipedes being in the angle between them, and the third maxillipedes and following appendages were attached to the sternal surface of the thoracico-abdominal process itself; and, as this process is at first bent forwards upon the rest of the germ, it follows that the appendages attached to it look upwards, while those attached to the anterior part of the embryo look downwards. As development proceeds, however, the embryo gradually straightens itself; more and more of the anterior part of the thoracico-abdominal process becoming continuous in direction with the anterior part of the embryo, until at length the whole of the cephalo-thoracic portion forms a convex surface parallel with the vitellary membrane, the abdomen only remaining bent upon the cephalo-thorax. The middle portion of the carapace is formed by the continuous calcification of the dorsal walls of the cephalo-thorax of the embryo. Its pleura are developed as two distinct folds, one of which, the rudiment of the branchiostegite, encircles the embryo posteriorly, and extends forwards on each side as far as the mandibles; while the other, the rudiment of the rostrum, and anterior cephalic pleura, is developed in front of the eyes, and extends on each side to meet the former. Rathke's clear account of this matter is in perfect accordance with what I have observed in *Mysis*, and shows conclusively that the carapace is not developed from any one or two somites in particular, but that its tergal portion corresponds with, and is formed by, the terga of all the cephalo-thoracic somites, while the branchiostegites and rostrum are developments of the lateral portion of all these somites; are, in fact, their pleura, like the terga, connate and continuously calcified.

The appendages are at first, as I have stated, similar to one another, and consist of a ridge which eventually becomes a plate, free at the outer end. This plate, in all the members, except the ophthalmic peduncles and the mandibles, then becomes bilobed externally, the inner lobe representing the endopodite, while the outer is the representative of the exopodite and epipodite. The two latter, when they are independently developed, become separated by a new fissure. The gills arise partly as outgrowths from the epipodites, partly as distinct processes from the parts to which they are eventually attached. The division of the limbs into articulations takes place from their distal towards their proximal ends. The heart appears late, at the posterior extremity of the cephalo-thorax, and therefore *behind* the yolk sac.

The nervous system of the post-oral portion of the cephalo-thorax consists at first of eleven pairs of ganglia, corresponding with the mandibles, maxillæ, maxillipedes, and ambulatory legs. The six anterior post-oral ganglia of each side soon coalesce in pairs, so as to form as many single ganglia; and of these the four anterior, viz., the mandibular, the two maxillary, and the first maxillipedary ganglia, unite into a single mass; the two hinder ganglia, viz., those of the second maxillipedary somites, next coalesce in the same way, and it is only subsequently that the two masses thus formed become fused into the single anterior post-oral ganglion of the adult. The other ganglia not only remain separate, but become wider apart with advancing age. A ridge on each side of the œsophagus represents at first the cerebral ganglion and the commissural cords, the latter being developed out of the posterior part of the ridge, and the former from its anterior portion. The cerebral ganglia are at first two on each side, but the posterior, whence the nerves to the antennary organs proceed, is much larger than the other, and would appear to represent two ganglia. The endosternites arise as processes from each of the eight posterior cephalo-thoracic sterna, which eventually arch over the ganglionic cord, and unite with one another.

The alimentary canal is produced by the gradual differentiation and demarcation of the sternal part of a distinct mucous layer, which invests the whole yolk, from the tergal part, which becomes the yolk sac. The sternal part of the mucous layer is at first, as in the *Vertebrata*, united with the serous layer, but eventually becomes completely separated from it, so that there is no mesentery, unless the falciform ligament which unites the anterior surface of the stomach with the fore part of the body-walls, and in which the great anterior and posterior suspensory muscles of the stomach are developed, should be considered in this light.

The liver, genitalia, and antennary glands are developed

from the walls of the yolk sac, which eventually becomes reduced to a small cœcal diverticulum, situated at the pyloric end of the stomach. The genital ducts in both males and females are originally diverticula from the corresponding regions of the genital glands; their external apertures and the copulatory appendages of the first abdominal somites in the male are not developed until some time after birth.

ORIGINAL COMMUNICATIONS.

CASES OF BONY CYSTS OF THE LOWER JAW, IN WHICH AMPUTATION OF THE DISEASED PORTION OF BONE WAS PERFORMED.

By ROBERT ADAMS, M.D.

Surgeon to the Richmond Hospital, Dublin.

I BEG leave to lay before the Society (a) two cases in which the right side of the lower jaw was greatly enlarged. The expanded bone formed a tumour, which in each case consisted of a bony cyst; in the one instance containing a solid material, and in the other the cyst or bony shell had fluid contents.

As in both these cases the disease had been for three years steadily increasing, and we knew of no medicine capable of arresting its progress, it appeared evident that the life of the patient would be ultimately sacrificed, if amputation of the portion of the lower jaw included in the disease were not resorted to.

The pathological anatomy of bony cysts of the lower jaw, and the surgical treatment they require, may, I believe, be somewhat elucidated by the relation of these cases, and by the exhibition of the morbid specimens which have been removed.

Case 1.—*Bony cyst of the right side of the lower jaw, with solid contents. Amputation of the diseased portion of the jaw, by the section of the bone near its symphysis, and excision of the right condyle from its socket.*

Andrew Macdonnell, aged 36, fisherman, a native of the county of Wexford, of robust habit of body, was admitted into the Richmond Hospital under my care on the 19th of January, 1857. He had a considerable enlargement of the right side of the lower jaw, which here seemed expanded into an oblong tumour, about the size of a goose's egg. The swelling extended backwards from the angle of the mouth to the back part of the ramus of the jaw. The cheek, in the situation of the zygomatic arch, and of the coronoid process, projected somewhat outwards. The submaxillary fossa was also occupied by a hard swelling, evidently formed by the basis of the lower jaw, which had become increased in breadth, and had extended itself much below the level of its ordinary situation.

A small but movable lymphatic gland could be felt in the submaxillary space. The cast taken of Macdonnell's face when he was admitted into Hospital (which was here presented) showed the external form the disease in this case assumed.

On examining the tumour in the mouth, the alveolar border of the jaw was seen expanded, so as to be nearly two inches in breadth, and the three molar, and the second of the bicuspid teeth had disappeared, and scarcely a trace could be found on the gum of the place they had once occupied.

Upon careful examination in the situation of the coronoid process and lower part of the temporal fossa, it appeared evident that this process was involved in the disease; at the same time, from the free motion of the jaw in its articular socket, it was equally evident that the surfaces of the articulation were not at all implicated. The tumour was remarkably elastic and yielding, yet it did not crackle under pressure of the fingers, nor convey to the examiner the idea of a fluid, but rather of some elastic material contained within a bony shell. The patient did not complain of any severe or darting pain whatever in the jaw; but simply of an aching sensation, which was only occasional. He did not wince when firm pressure was made with the finger on the swollen part.

As to the origin of this disease he said that about three

(a) Pathological Society of Dublin.

years and a half ago he got a severe knock on the right side of his lower jaw, the effect of a fall; some short time afterwards, while endeavouring to settle a dispute between two of his friends, one of them struck him with his clenched fist on the very same spot, where a few days before he received the injury by the fall. About eight or ten days after this, he felt an aching in the jaw, with some stiffness in the motion of the joint at the affected side. These symptoms had existed for about fifteen months, when he became alarmed, having observed one day two small hard swellings on the gum; these gradually, from month to month, somewhat increased. The three molar teeth successively became loose, and elevated above their ordinary level, so as to prove annoying to him when the jaws closed. He on this account had them extracted. The alveoli closed at once, and the swelling went on increasing as before. He observed that when firm pressure was made on the swollen jaw there oozed out from the alveoli, formerly occupied by the fangs of the teeth, a thin fluid which mixed with the saliva. He thought that for the last six months the swelling seemed to enlarge more rapidly than it had ever done before. Under these circumstances, he was, by the recommendation of my friend, Surgeon Owen, of Gorey, admitted under my care into the Richmond Hospital. A consultation of the Surgeons of the Hospital having been held on the case, it was agreed that there was only one measure to be thought of to relieve him, namely, the amputation of all that portion of the lower jaw which was included in the disease, and that the condyle should be removed from its socket if such a course were found necessary. The healthy aspect of the man, the absence of any fungous growth from the gum, or of any fetid discharge, and of all hard glandular enlargement, the sound appearance of the mucous membrane, and of the skin covering the tumour, all gave us the idea, that the nature of the growing tumour was benign; yet it was not to be concealed, that the tumour, if not arrested, must, by its progressive enlargement, ultimately be the cause to him of a lingering death; all which having been explained to him, he made up his mind to submit to the severe and painful operation of amputation of the diseased portion of the bone. Unfortunately it was a case in which, in our opinions, chloroform could not be safely resorted to, to lessen the sufferings of the patient during the operation.

NOTE.—In this city we usually object to the use of chloroform when the patient is in the sitting posture, and this is the position we always place the patient in, whenever amputation of any portion of the lower jaw is had recourse to.

The patient then, on the 4th of this month, Feb. 1857, was placed sitting in a chair with a high back, and was well secured in it. The operation was begun by an incision having been made from above downwards, through the whole substance of the lower lip, commencing a little nearer to the middle line, than the right commissure of the lips, thus avoiding the commissure itself, for reasons hereafter to be mentioned. The chain-saw was then introduced behind the arch of the lower jaw, and quickly passed through the bone, the section having been made through the line of the socket of the first bicuspid tooth, which had been extracted two days previously. The next incision through the skin was made parallel to, but a little above, the basis of the jaw towards the angle of the bone at the right side, and this having been continued upwards in front of, but parallel to the back part of the ascending ramus, the skin forming a flap was thrown up so as to expose fully the morbid mass of the tumour. The attachment of the masseter muscle was cut through, and the chain-saw was then had recourse to, and introduced behind and as close as possible to the inside of the ramus, and the bone cut across just at the basis of the neck of the condyle and coronoid process.

The portion of the lower jaw, which constituted almost the whole of the disease, was thus isolated and included between the two sections made by the saw.

The next proceeding to be undertaken was to disengage the diseased portion of the lower jaw from the surrounding soft parts. This was done by detaching any fibres of the masseter or internal pterygoid muscle, which still adhered to the ramus of the jaw, and next by severing the connexion of the horizontal portion of the bone from the muscles which were attached to the mylohyoid ridge, and thus connected it to the os hyoides.

To effect this safely and expeditiously the bone was firmly held in a strong forceps, designed for such a purpose, and

while Mr. Cusack rotated the bone as much as possible from within outwards, I ran the edge of the knife at the inside of the jaw along the line of muscles attached to the mylohyoid ridge, while this attachment of muscular fibres was severed; the bone was easily separated from the surrounding soft parts. Numerous small arteries, which were necessarily divided, furnished a good deal of blood; some of these were secured, and amongst them the labial was tied, before the further steps of the operation were proceeded with. Having now examined the state of the coronoid process, and of the condyle of the lower jaw, it was plain that these also were implicated and must be taken away. The incision through the side of the face was then extended upwards towards the lobe of the ear, the capsule of the lower jaw was exposed, and we next endeavoured to draw down the coronoid process, which was expanded into a cell, but the altered bony structure gave way under the forceps; and although we effected the removal of the altered coronoid process completely, we could not, as directed by other operators, by making use of this process and that of the neck of the bone as levers, disarticulate its head, and draw it forwards away from the glenoid cavity and from the dangerous vicinity of the internal maxillary artery. I was compelled, therefore, to open cautiously in front the capsule of the articulation, and I then introduced above the head of the bone the extremity of the handle of a tooth forceps, which I used as a lever, and by such means the condyle was pushed downwards from its place, the attachment of the external pterygoid muscle to it was next cut across with a blunt-pointed bistoury, and this portion of the bone removed. Some delay now occurred in detaching several portions of the coronoid process, which still remained adherent to the temporal muscle.

When the bleeding ceased I drew down the flap of the cheek, and carefully joined the wound through the lip by hare-lip needles. The wound was dressed, and the patient placed in his bed.

During the day and night the patient had some hæmorrhage, but pressure of the fingers sufficed after a time to arrest it.

During the night the patient was in rather an alarming state from constitutional irritation. His skin was cool, and rather in a clammy state; his pulse small, weak, 132 in the minute. He sighed deeply, and though he did not absolutely faint, he seemed to have a continual tendency to syncope; in short, he seemed to be in an extreme state of mental and bodily depression.

For these symptoms he was ordered brandy and wine freely during the night, with fifteen drops of the solution of muriate of morphia every second hour. After an hour he slept, and when the third opiate draught was taken, which was about half-past two, he fell asleep, and continued so until morning. On awaking, he stated he felt considerably better; his pulse was stronger, but he was still in a condition requiring the judicious use of stimulants. He was fed by means of a gum elastic tube, fastened to the spout of a drinking cup.

Feb. 14.—It is now seventeen days since the day of the operation, and the man seems in perfect health; and one is truly surprised to see such a trifling degree of deformity resulting from the operation. The line of the incision made for the removal of so large a portion of the lower jaw in the lip has joined by the first intention, and the rest of the line which runs parallel to the bases of the lower jaw and posterior margin of the ramus will, I doubt not, be fully cicatrized in a few days.

In commenting on the "modus operandi" adopted in this case, some may think that the vertical incision through the red border of the lip might have been better omitted, as the chain saw could have effected the section of the bone without the necessity of this preliminary step having been resorted to. On the other hand, it must be admitted, that to expose fully the diseased mass we had to remove, appeared to be a great desideratum in such a case, and which was best answered by the vertical incision through the substance of the lip, which permitted of the flap being thrown up fully on the cheek. By omitting the vertical incision above spoken of, it is said we should avoid the deformity likely to result from the cicatrization of such a wound. To which, however, I would reply, that the cicatrization of such a wound as that above-mentioned need not of necessity be attended by deformity, provided that the incision through the lip be made as it was here (not at the commissure of the lip, but) at a little distance from it, nearer to the middle line. In the drawing which

I lay before you (by Conolly), which is an exact representation of the patient's face, now but the seventeenth day since the operation, it may be seen that such an incision is not necessarily followed by any deformity whatever.

The second incision through the skin, parallel to the lower margin of the inferior maxilla, should be made somewhat above the level of this margin, with the obvious view of rendering it easy to compress the labial artery, as it turns round the bone, when we wish to include its cut extremity in a ligature.

In two cases, from inattention to this simple rule, I saw much difficulty experienced by the Surgeon in securing the labial artery, when performing this operation; his incision having been made along the very margin of the lower jaw, the artery, as soon as cut, shrunk in behind the bone, and could not be compressed nor commanded, and bled freely while the Surgeon was vainly endeavouring to secure it by ligature, which, in consequence of the retraction of the cut artery behind the margin of the lower jaw, was only, after the loss of much blood, at last accomplished.

When the bone was in this case sawn in two places, the tumour it formed was next to be cut out, just as we should cut out any ordinary tumour from this situation; but let it not be considered as a matter of indifference how this tumour is to be dissected out. The best method has been pointed out by Mr. Cusack, and was adopted here, namely, to commence the final detachment of the enlarged bone (which had been already sawn across in two places) from the surrounding soft parts, by cutting through the mucous membrane of the mouth down upon the inside of the lower jaw-bone, where the mylohyoid ridge exists. Here, we know, are attached the muscles which connect this portion of the bone to the os hyoides.

When the operator thus cuts down on the inside of the lower jaw, his assistant seizes the bone in a strong forceps, well constructed for such a purpose, and rotates it from within outwards on its long axis, and then it can be drawn out at the same time that it is being dissected from its place, the operator always presenting the cutting edge of the knife towards the bone.

When this portion of the distended shell of the bone, including within it the great mass of the disease, was taken away, we next had to detach the condyle, and coronoid process, which was an operation attended with some difficulty, but it was at length effectually accomplished.

Some may object to the mode of proceeding adopted in the operation, so far as that the second section of the bone by the saw was resorted to at all, it having been found afterwards necessary to disarticulate this side of the jaw-bone; but for my part I do not regret that this was the plan adopted here, because I feel persuaded that if, contented with this one division of the bone only, I had next proceeded to disarticulate it from its socket, I should have then experienced the greatest difficulty in separating the attachment of the temporal and external and pterygoid muscles from the enlarged coronoid process and head of the condyle, as well as in safely opening the capsular ligament of the joint.

The dissection which this disengagement required, "when the knife was continually used in the immediate neighbourhood of large and important arteries," (b) was, it is plain, much more safely accomplished than it could have been done, had not the principal part of the morbid mass been previously removed. I should have been embarrassed by the presence of a large tumour obscuring the recesses, from which I had to dissect out the above-mentioned processes of the lower jaw. Indeed, I could say, that the same principle I here advocate applies to the removal of any large tumour whose narrow and most adherent part is engaged in any deep recess, when, although the great bulk of the tumour has been disengaged from the surrounding parts, its narrow neck and most critical connexions are still to be managed; under such circumstances—when, for example, the Surgeon is removing a large tumour from the submaxillary space, when arrived at a certain stage of the operation as this just alluded to, I have seen him derive much advantage from retrenching the great bulk of the swelling, which had obstructed his view of the deeper-seated parts; and after this with much more facility was he enabled to disengage from its deeper connexions the neck of the tumour. When we examine the portion of the

lower jaw thus removed, we find it extends from the alveolar socket of the second bicuspid tooth backwards, and includes the coronoid process and condyle. The condyle we observe hollowed out into a bony shell, even to the interior of the head of the bone itself, but the articular surface was fortunately perfectly normal. The body of the lower jaw, we perceive, is expanded into a bony cyst, or shell, which encloses within it a cartilaginous-like material, resembling that we find composing the interior of those enlarged fingers we see affected with spina ventosa or benign osteosarcoma.

The case of bony cyst of the lower jaw which I have just detailed I consider to be of the same nature as the above-mentioned spina ventosa of the bones of the hand, or benign osteosarcoma. This is a disease which, in my experience, I have never known degenerate into carcinoma; but one which, if not arrested, takes upon itself an unlimited growth, until softening of the contents of the bony cyst or sloughing takes place, or the patient is carried off by hectic fever, which I have seen to occur in one case of this disease affecting the lower jaw.

I shall conclude by observing that, in cases of a decidedly malignant nature, the disease should not be interfered with by the Surgeon; but when considered "benign," on the contrary, that amputation of the morbid part should be resorted to; and I will add, that no operation, however painful or severe, should be considered equivalent to the slow misery the unhappy patient is destined to endure, if his malady be allowed to take its miserable course until it causes the death of its victim.

In the case which I have just related the operation was necessarily tedious, painful, and severe, but I am happy to say that so far as this (the seventeenth day after the operation) everything has gone on in the most satisfactory manner.

The second case of amputation of a portion of the lower jaw containing a bony cyst, which I have to communicate, I shall reserve for another communication.

FURTHER REMARKS ON AMYLENE.

By JOHN SNOW, M.D.

(Continued from page 334.)

AMYLENE differs widely from chloroform, and still more from sulphuric ether, in the promptitude with which patients generally recover from its effects. This is a character of amylene which might have been predicted from its physical properties. I have many times observed how quickly, and, indeed, almost instantaneously small animals recover from the stupor occasioned by certain permanent gases which are sparingly soluble in watery fluids, as olefiant gas, carbonic oxide and carbonic acid gases, nitrous oxide and the gaseous oxide of methyle. Now amylene is so volatile as to approach to a permanent gas; at a temperature a little above that of the human body it would be a gas, and the vapour is very sparingly soluble in watery fluids, and consequently in the blood. Sulphuric ether is, indeed, as volatile as amylene. I cannot remember any other two bodies whose volatility is so nearly alike; but sulphuric ether is very soluble in watery fluids, in comparison with amylene. Water dissolves a tenth of its volume of liquid ether, or 23 volumes of the vapour. Consequently a large quantity of ether is absorbed during inhalation, and the blood has to pass many times through the lungs before it is freed from it. The quantity of amylene which is absorbed is, on the contrary, extremely small, as I explained in my paper in January, and this, together with its volatility, is no doubt the reason why the patient recovers so promptly from its influence. In about a minute after the operation is concluded, and the inhalation left off, the patient usually awakes from the influence of amylene, and completely recovers his consciousness. The same quick recovery may take place after chloroform, but more frequently it is a few minutes before the patient is quite conscious. I have seen two or three instances in which a child has slept for twenty minutes or half an hour after amylene, but it must be remembered that children sometimes sleep for hours after chloroform in cases where the operation has not produced a painful wound. The quick recovery of the patient is a decided advantage in all minor operations. In great operations, where the patient is obliged to keep his bed afterwards, it is of less consequence whether he wakes promptly or not, although, even under

(b) Observations by Mr. Lawrence, who, in a similar case, adopted the same mode of proceeding. See *Lancet*, vol. i. 1834-35, page 188.

these circumstances, his friends are generally anxious to see him recover his consciousness. The smarting of the wound after an operation is often prevented longer when chloroform has been employed than after the use of amylene, and this may be considered as a slight advantage which chloroform possesses in certain cases. In some instances, however, in which chloroform has been used, the patient begins to show symptoms of suffering pain in the wound before he has entirely recovered his consciousness, while after amylene I have not seen symptoms of pain in the wound till consciousness had completely returned. In any cases where the pain after an operation, either from a wound or ligatures or caustic, is very great, the inhalation of the agent which has been employed may be gently repeated at times until the pain has a tendency to subside, or till an opiate shall take effect.

The patient generally seems surprised or confused on first recovering from the effects of the amylene, but in a few seconds he becomes, in most cases, completely conscious of his position, and feels that his mind has been wandering. He often says he does not know where he has been in his dreams, or that he has been a long way. Sometimes he does not remember exactly what he has dreamed about; at other times he does. All this is common enough after chloroform, except that the process of recovery is generally much slower; but there is one condition of mind which is very common after chloroform, which I do not remember yet to have met with after amylene. If the patient, when he awakes from even a deep and prolonged insensibility, is in the same position as when he became unconscious, he often asserts that the vapour has not taken effect, he requests that the operation may not be commenced, and will not believe it is over till convinced by his own senses. It seems as if, in such cases, a piece had been snipped, as it were, out of the mental existence of the patient, and that not even dreams had occurred.

The patient has nearly always a very cheerful expression of countenance when he recovers from the amylene, and the state of his mind, as indicated by his conversation, corresponds to his look. Dr. Debout has noticed the same circumstances. Speaking of the patients operated on under amylene in Paris, he says, "*A leur réveil et le premier moment de stupeur passé, leur physionomie est épanouie.*" The same state of countenance and mind is met with after chloroform only now and then, and is by no means the rule. I have met with hysterical laughing and crying in three females after operations under amylene, which I think is not oftener than the same symptoms might be met with after chloroform. In one case where Mr. Fergusson amputated the leg of a young woman, the hysteria lasted about an hour; in the other two cases it subsided in a much shorter time, although the patients were very subject to this affection.

Amylene appears to support the pulse under loss of blood at least as well as chloroform. I have not as yet found the pulse to fail, although there was rather free hæmorrhage in one or two operations.

There has been a little headache in a few cases as the effects of this agent were subsiding, but it has passed off in a few minutes.

I have already administered amylene in many on the chief operations of surgery. There have been five cases of lithotomy in the male, three of them by Mr. Fergusson, in King's College Hospital; the young man and the child already alluded to in my former papers, and another child; and two cases in St. George's Hospital, one by Mr. H. C. Johnson, and the other by Mr. Pollock, both children. All the five cases have done well. In addition to the amputation of the thigh by Mr. Henry Lee, mentioned in my paper in January, I administered amylene in a similar operation by Mr. Tatum, in St. George's Hospital, and also in an amputation of the forearm by the same gentleman, and an amputation below the knee by Mr. Fergusson, in King's College Hospital. I have administered amylene in the removal of the head of the femur by Mr. Bowman; in the removal of three large tumours near the groin, two of them by Mr. Bowman, and one by Mr. Fergusson; in the removal by Mr. H. C. Johnson of a tumour deeply seated behind the angle of the jaw, and in the removal of six tumours of the breast by different Surgeons. There have also been three operations for stricture by perineal section, two by Mr. Fergusson, and one by Mr. Curling. The amylene has answered perfectly well in all these cases,

so there can be no doubt of its general applicability in the great operations of surgery.

Amylene has succeeded perfectly well in operations of the eye. In the extraction of cataract it will probably have an additional advantage, in the almost entire absence of sickness after its use. I have exhibited it in two cases of extraction of cataract, performed by Mr. Bowman, and one operation for cataract by drilling. Also in six cases of excision of the eyeball for various diseases, by Mr. Bowman; one of these cases occurred in King's College Hospital, one in the Ophthalmic Hospital at Moorfields, and the others in private practice. There have been also twelve operations for strabismus, and a number of other operations on the eye and the eyelids, in which I have administered amylene chiefly for Mr. Bowman. I have given it in three cases of the forcible rupture of the adhesions in ankylosed joints, and it has answered perfectly in preventing the pain. Two of the cases were in King's College Hospital, and one in the Orthopædic Hospital, under Mr. Lonsdale.

I have employed amylene in two cases of dislocation of the humerus, both patients of Mr. French in the St. James's Parochial Infirmary. The first case was a dislocation downwards in a woman aged 68. She inhaled for three minutes, when extension being made, the bone slipped into its place with the utmost ease, although Mr. French had found a good deal of resistance in an attempt he made just before sending to me—not any serious resistance or pain, but so much of both as led him to think it would be a good opportunity for trying the amylene. In two minutes after the reduction of the dislocation, and five minutes after beginning to inhale, the patient was quite awake again, and said that she had felt nothing. The other case was a dislocation forwards in a man aged 72. No attempt to reduce it was made till the amylene was administered. The case was under the care of Mr. Buzzard. After inhaling two or three minutes, the old man got into a state of muscular rigidity, and did not get beyond this state, although I continued the inhalation nearly ten minutes until about two ounces of amylene were used. He was quite insensible, but the rigidity prevented the reduction of the dislocation. So I discontinued it, and sent for some chloroform, which I administered a few minutes afterwards. It produced muscular rigidity rather stronger than that which the amylene had caused, but by continuing the inhalation steadily for about two minutes, the limbs became relaxed, and the humerus slipped easily into its place. This is the only case in which the amylene has not effected the purpose for which I have exhibited it; and I have no doubt, for reasons which I stated before, that I could have produced relaxation of the voluntary muscles by increasing the strength of the vapour the patient was breathing; but there were one or two circumstances which at the moment stood in the way of this. The patient's face was so hollow from his loss of teeth that the face piece fitted badly, and as it was early in a frosty morning the water bath of the inhaler was colder than usual. These defects could have been remedied if necessary, but I thought it as well to use chloroform; and I am inclined to think that chloroform is the better agent to employ in those rare instances where relaxation of the voluntary muscular system is required. I remain also of the opinion, which I expressed years ago, and which I occasionally act on, that sulphuric ether is preferable to chloroform in the reduction of old dislocations, as it seems to produce complete relaxation of the muscles more readily and constantly than chloroform.

Amongst the minor operations in which I have administered amylene, have been eighteen operations of tenotomy, chiefly by Mr. William Adams and Mr. Lonsdale, in the Royal Orthopædic Hospital, and mostly in children and young people. An inhalation of about two minutes generally sufficed to prevent the pain entirely. I find that some surgeons have entertained an objection to use chloroform in tenotomy, lest it should cause a relaxation of the muscles, which would interfere with the operation. I have, however, been in the habit of exhibiting it for eight or nine years, both in King's College Hospital and in the private practice of Mr. Fergusson and some other surgeons. I never carried the effect of the chloroform so far as to cause relaxation of the muscles, and I have generally heard the tendons give way with a snap. With a small dose of amylene the tension of the muscles not only remains, but is usually somewhat increased.

Amongst the more important and painful operations in which I have given amylene, and where it has answered per-

fectly, I ought to have mentioned several cases of necrosis affecting various bones,—as the femur, lower jaw, tibia, etc. I administered it to an infant about six months old, in King's College Hospital on January 17th, previous to Mr. Fergusson operating for hare-lip. The child was insensible to the knife at the beginning of the operation, but began to cry before the incisions were finished, and cried very lustily as the hare-lip pins were introduced. The property, previously alluded to, which amylene possesses, of allowing the patient to awake so quickly, although an advantage in most operations, is not desirable in operations about the mouth, where the inhalation cannot very well be continued or resumed. This is more especially the case in young children, who awake, even from chloroform, more quickly than we wish in such operations. There have been four or five operations on infants for hare-lip since the one above mentioned, but I have given either chloroform or sulphuric ether. In all the other operations in this Hospital, when I have been present to administer any narcotic vapour, since the 13th of December last, I have exhibited amylene, in order to give it a fair trial. There have been several plastic operations on the face in patients of adult age, or nearly so. The amylene has always prevented the pain at the beginning of the operation, and has been continued on a hollow sponge afterwards for some little time. On two or three occasions it was so continued with success to the end of the operation; but two or three times the sponge became so cold by the continued evaporation of the amylene, as to make my fingers ache, and to limit the evaporation so much that the patient seemed about to awake. I therefore put a little chloroform on the sponge, and it answered the purpose desired. Chloroform absorbs much less caloric than amylene during its evaporation, as the patient inhales, on account both of the quantity which evaporate being less, and of the specific gravity of the vapour being greater.

In tooth-drawing, amylene has both its advantages and disadvantages as compared with chloroform. The prompt recovery from its effects, and the almost constant absence of sickness, are decided advantages, as also is the greater ease with which it is inhaled; but in cases where eight or ten teeth require to be extracted at once, as often happens, where my assistance is required, or where several stumps are in the alveolus, the effect of amylene does not last long enough to complete the operation, without one or more repetitions of the inhalation. A difficulty in getting the mouth open occurs about as often, I think, with one agent as the other.

I have only as yet had leisure to administer amylene in two cases of labour. One was under the care of Mr. Buzzard in the St. James's Infirmary, on January 20th. It was the patient's second labour, and was a lingering one, having lasted 35 hours. I administered the amylene only during the last 20 minutes preceding the birth of the child, the head being advanced so as to rest on the perinæum. The vapour was given well diluted at the beginning of each pain. The patient breathed very deeply, and got relief very quickly from each pain; the mind was quite clear between the pains, and I could not tell whether or not the consciousness was removed for half a minute or so, during each pain. Half a fluid ounce of amylene was used. The other case occurred in an out-patient of King's College Hospital under the care of Mr. Meadows, Dr. Farre's assistant. It was the patient's third confinement. I arrived three hours after the commencement of labour, and two hours before the birth of the child. The os uteri was almost dilated on my arrival, and the pains were very strong, recurring every three minutes or so. They continued to increase in strength to the last. The patient was probably unconscious for a brief period during the uterine contractions, while the amylene was administered, but between the pains she was quite conscious. Under the use of chloroform, in a labour with brisk and frequently recurring pains, as in this case, the patient usually sleeps on from one pain to another, but I offer no opinion at present as to which state of circumstances is preferable. The amount of amylene inhaled in this case was three fluid ounces. The quantity used in each of these cases must have been about half a fluid drachm in each pain, and this is the quantity I had previously recommended Dr. Tyler Smith to employ, when he did me the honour to ask me some questions about amylene before he employed it in a case of labour. The results arrived at by Dr. Tyler Smith, in the case in which he employed amylene, were similar to my own, viz. relief of suffering during the uterine contraction,

consciousness between the pains, and no interference with the progress of labour. I look forward with some interest to a more extended experience of amylene in midwifery. Chloroform answers so extremely well that there does not seem much room for improvement; there are cases, however, in which chloroform has a tendency to retard the progress of labour, by diminishing the force, duration, and frequency of the uterine contractions, even when administered very moderately; and it remains to be ascertained, by observing a number of cases, whether amylene may not be free from this disadvantage.

In the concluding part of this paper I shall make some remarks on the mechanical means of administering amylene in the most efficient way, and on its relative safety as compared with chloroform and ether.

(To be continued.)

ON MALIGNANT GLANDULAR TUMOURS

OR,

HYPERTROPHIES OF THE MAMMA IN THE FEMALE.

By WILLIAM AITKEN, M.D. Edin., L.R.C.S.E.

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THE two following cases are related with the view of illustrating a morbid condition of the female mamma, the malignant tendency of which has not been hitherto observed, and the pathological nature of which requires more extended investigation.

The history of the first case is in the words of Mr. Spencer Wells, in whose practice at the Samaritan Hospital the case occurred, and who requested me to examine the state of the mamma, and the morbid conditions of the other parts which subsequently became affected.

The history of the second case is in the words of Dr. J. Adair Laurie, the distinguished professor of Surgery in the University of Glasgow. This case I had an opportunity of observing during life, and of examining after death; and an account of which Dr. Laurie published in the *Glasgow Medical Journal* for April 1853.

Case 1.—*Glandular tumour of the right mamma, of slow development. Removal.*—*Secondary lobular enlargement of left mamma. Secondary subcutaneous nodular deposits. Secondary nodular deposits in the lungs, liver, and ovaries. Ulceration in cicatrix of right mamma. Sudden death.*

Mrs. Roper, æt. 33, married, admitted to Samaritan Hospital in November 1854. Has had one child seven years ago, two miscarriages since the last in September 1853. A few months after miscarriage, eighteen months before admission, began to complain of pain in right breast. It became hard, and she suffered a great deal from it. I consented to remove it at her own wish, on account of the extreme pain she suffered. One gland in the axilla was swollen but not hard. I excised the breast, Nov. 23, 1854, but did not remove the axillary gland. The wound healed by first intention. The swelling of the axillary gland disappeared, and she remained well for six months. Then a small tumour appeared near the cicatrix, which soon became painful, uterine symptoms appearing at the same time, viz. lumbar pains, flooding and leucorrhœal muco-purulent discharge. Admitted with these symptoms to Middlesex Hospital, Sept. 25, 1855. Here she gained some relief to uterine symptoms, and was discharged Dec. 3, 1855. Two days after this she was admitted to the Marylebone Infirmary, complaining of cough, debility, and lumbar pain. Soon afterwards she noticed small tumours under the integument at anterior part of thorax, more or less painful. The number of the subcutaneous tubercles continued to increase, and in August, 1856, the cicatrix on the breast began to ulcerate. She believes no tumour formed in the cicatrix before ulceration commenced. She remained in the infirmary until readmitted to Middlesex Hospital, Nov. 8, 1856. Here she continued gradually to decline in health, (the ulceration in the breast extending very slowly, no fungating growth from it,) and she died at last rather suddenly, March 5, 1857.

Autopsy, March 7th.—Emaciation, but not extreme; hard, round, subcutaneous tubercles in many parts of trunk, not of

limbs; a great deal of fluid in cavities of pericardium and both pleuræ; lungs congested. On surface of both lungs immediately under pleura small, hard, white deposits, varying in size from that of the head of a small pin to that of a mustard-seed; some rather larger in lung substance superficially. In the substance of the liver were some scattered, round, white, opaque, hard, isolated tumours, which could be enucleated easily from the surrounding liver substance. On pressure they yielded a turbid white juice. Two or three similar tumours were beneath the mucous membrane of the gall-bladder.

Uterus.—Corrugation of the neck, and superficial ulceration; no deposits in the substance of the organ. Both ovaries enlarged, and hard from deposit.

Cranium.—Three tubercles between arachnoid and dura mater; no deposit in brain.

Several hard nodules in left breast.

Microscopical Examination.—A careful microscopic examination of the primary mammary tumour in Mr. Wells's case showed that the enlargement consisted in an abnormal condition of the secreting epithelial cells of the ducts, and of the lobules of the gland, so as to involve in one uniform tumour the gland substance of the whole organ. The secreting cells were altered from their natural spheroidal shape, and were seen in almost every variety of form, abundant, granular, and distending, especially the acini of the gland. The morbid condition appears to have been entirely confined to the secretion of the ducts, and the acini of the lobules. Neither in the mass nor on section did the mamma present any of the outward characteristics of a scirrhus tumour. The secondary nodules in the other mammary gland presented characters similar to the primary tumour of the right mamma, and appeared to involve a few lobules of the gland merely. The secondary deposits in the other parts of the body presented elements of a granular character, combined with minute cells, and sometimes fine filamentous tissue.

Case 2.—*Acute hypertrophy, or glandular tumour of both mammae, of rapid development. Secondary nodular deposits in the liver. Secondary deposits in the ovaries.*

Mary D., aged 30, house servant (cook, — Club), called upon me about the 9th April, 1852, complaining of general pyrexia. At this visit she made no complaint of her mammae, but when I saw her again, two days afterwards, she said they were painful. I found them very slightly enlarged, painful to the touch, the areola I thought darker, and the papillæ more prominent than natural; the integument otherwise normal. Suspecting sexual uterine excitement, I questioned her very closely. The girl being from the Highlands, and speaking English imperfectly, did not give very satisfactory or intelligent answers; but the impression left on my mind certainly was, that she might be, and probably was, in a very early stage of pregnancy. I accordingly prescribed some gentle diaphoretic medicine, and waited the result. The only cause that she could assign for the enlargement of her breasts was sudden transitions from heat to cold, the necessary attendant on her employment as a cook.

She did not improve, and as the breasts continued to increase rapidly, I sent her to the Infirmary on the 19th April. She proved a very discontented patient, and twice left the hospital without permission, so that the treatment employed had not very fair play. From whatever cause, none of the means prescribed had the slightest beneficial effect. They consisted, in the early stage, locally of friction and fomentations, followed by cold and gentle pressure, leeches, and acupuncture; internally, mercury to the extent of gentle salivation, and iodine freely.

On her admission into hospital, 19th April, the breasts are described as enlarged to double their natural size, firm, elastic, resistant to the feel, but very irritating and inconvenient from their weight and size. The integuments not discoloured, and slightly painful. She left the house on the 28th, and returned on May 7. The mammae are then reported "to have increased very much in size, to be affected with acute stinging pain, and to have assumed a bluish colour." These symptoms continued to increase, the suffering became very great, and the colour of both breasts was a deep purple before her death. They were never in the slightest degree "pendulous;" on the contrary, although moveable, they were firmly bound to the chest, and from their tension caused not only pain, but considerable difficulty of breathing. The lobulated form of the glands was very distinctly felt. That their vascularity was great was

shown by the jets of blood which flowed from the puncture of a common-sized grooved needle. In a few minutes I collected 6 or 8 ounces, and to all appearance I could have bled her as freely from this aperture as if I had opened a vein in her arm. About the 10th or 12th of May her general health began to give way rapidly, typhoid symptoms set in, she became partially hemiplegic, and her tongue was much drawn to the left side. She died on the 17th. I showed her twice to my colleagues in consultation; none of them had ever seen a similar case. Surgical interference was considered quite inadmissible, and no means, beyond those already employed, were suggested. I entrusted the post-mortem examination to my friend, Dr. William Aitken, Demonstrator of Anatomy to the University, and Pathologist to the Infirmary, who has most kindly sent me the following report:—

"A case having been taken of the external form of the breasts immediately after death, the mammary glands were removed from the body for inspection and preservation. The right gland was larger than the left, but each preserved the characteristic lobulated form and arrangement of the gland substance. Along with the skin, and a small portion of pectoral muscle which accompanied each gland, they weighed six pounds fourteen ounces; and it was observed that the skin covering them was less tense than before death, probably from the gravitation of the blood towards the dorsal regions of the body. The right, and larger gland of the two, when freed of all its accessory parts and hardened in spirit, so as to remove a considerable portion of water from its substance, weighed two pounds two ounces.

"*Microscopic examination.*—The hypertrophy appeared to depend upon the following conditions of the gland substance, and its accessory parts:—1. The acini, or sac-like dilatations of the extreme ends of the gland tubes, were distended to about twice their size, compared with a mamma which had never secreted milk. This distension appeared to be due, partly to a granular exudation, and partly to a very large amount of epithelial cells, mingled in some places with globules of oil. The ducts of the acini were also in some places irregularly distended with this epithelial secretion. 2. On examining a section of the gland, harder portions could be observed, which, when isolated from the rest of the gland, varied in size from a millet-seed to a pea, or a bean; and microscopic observation showed that these harder portions were the seat of an abundant exudation and secretion. 3. Immediately below the skin, a layer of exudation filled up the space between the lobules, making the surface of the gland assume a rounded aspect. This exudation was of a granular appearance, similar to fibrin in its first stage of organization; and it was found abundantly exuded into the interspaces between the tubes and ultimate lobules of the gland, apparently taking the place of the fat usually found there, and which had probably disappeared by absorption, the result of pressure. In each axilla the lymphatic glands were much enlarged, and infiltrated with a granular exudation.

"*Liver.*—Circumscribed deposits were irregularly and sparsely scattered throughout the whole substance of the liver, projecting in some places from its surface. They varied in size from a pea to a plum, presented a granular appearance microscopically, and no liver cells could be distinguished among the substance of these deposits; and while they were perfectly circumscribed by the capsule of Glisson, the secreting substance of the gland was condensed round their periphery.

"*Uterus and ovaries.*—The ovaries and broad ligaments of the uterus were morbidly adherent to the walls of the pelvis, and appeared to be infiltrated with a serous exudation. The ovaries, on removal (and more especially the right one), were found to be in a state of inflammatory softening, and much enlarged. The Fallopian tubes, also, were unequally distended, especially near their fimbriæ, which adhered firmly to the ovaries. The softening was so great, that the substance of the right ovary was easily broken down under the finger, and no appearance of extravasated blood, or of corpora lutea, could be detected in either. The uterus was somewhat larger than one whose cavity had never been distended by conception. Its neck was more especially elongated, and did not terminate in an anterior and posterior lip, separated by a transverse slit, as in the normal uterus. A pointed sugar-loaf-like apex projected into the vagina, through which an opening with an irregular border led into the cavity of the uterus; but so contracted, that a probe about two lines in diameter was all that could be passed through it. The whole aspect of this

part of the uterus perfectly resembled what is described as the result of ulceration and cicatrization of the neck and mouth of the uterus. The substance of the organ, more especially near its fundus, enclosed condensed white portions, like the commencement of fibrous tumours in its substance."

Remarks.—Every one who reads these two cases must be at once impressed with their similarity. The only difference between the two appears to consist in the one running a rapid and acute course, and involving the whole glandular substance of both mammae; in the other, running a more prolonged course, and affecting the whole gland substance of one mamma, and only a few lobules of the other. They are cases undoubtedly peculiar, and I do not know of any others on record resembling them. In both the primary disease became developed in the gland substance of the mamma, and, therefore, both are, in the first instance, to be classed with the mammary gland tumours of Paget, or the hypertrophies of Birkett and of Lebert.

Mr. Paget remarks, at page 258, vol. ii., of his Lectures on Surgical Pathology, that "there are no facts to suggest that the glandular tumours are, as a rule, other than innocent;" but we know also that there is no class of tumours so singularly variable in their course of existence and development as the mammary glandular tumours; and the two cases now detailed are instances of such tumours having undoubtedly a malignant tendency. The ages of the patients were nearly similar, namely, 30 years in the one case, and 33 years in the other. In both, uterine irritation preceded and accompanied the morbid changes in the mammary glands. In both, the pain of the gland swelling was acute and excessive. In both cases, nodular secondary deposits of precisely similar microscopic appearance pervaded the substance of other organs, such as the liver, and varies in both cases, and also the subcutaneous tissue and lung in the others. The os uteri exhibited the appearance of being ulcerated, or of having been so, in both instances.

There are three points in the history of these two cases which require special notice, and which demand for glandular tumours of the mamma a more extended pathological investigation:—

1. As to the cause of such peculiar morbid conditions of the mamma as have been now described.

2. As to the malignant nature of the course of the disease, and the source of the malignancy.

3. As to the nature and pathological significance of the secondary deposits.

1. There is evidence, in both cases, that uterine irritation preceded the development of the mammary tumours; and it is a well-known and universally accepted physiological truth, that the uterus, the ovaries, and the mammary glands, are held together in sympathy of nutrition and of function by ties of the strongest kind; and any morbid change in one of these organs is, as a rule, made manifest by some sympathetic change in the others. Beyond this, however, the cause of such tumours is obscure; and if uterine irritation is the common origin of both, "why," as Dr. Laurie remarks, "so rare a consequence from so common an antecedent?"

2. The malignant nature of the course of the disease made itself apparent very rapidly in the one case (thirty to forty days), and with comparative slowness in the other (2½ years).

So far as the primary disease is concerned, a superficial examination of the tumours might warrant a classification of them with *Epitheliomata*. But, then, the class of tumours known as *Epitheliomata* are made up of variously modified scaly, epithelial cells, variously modified in shape; and we know also that secondary *Epitheliomata* are seldom seen beyond the zone of direct propagation of the primary local disease; and that distant multiple deposits are not common. Relapses of *Epitheliomata* only occur in the immediate vicinity of the primary tumour, or in the adjoining glands, and are rather a continuance of the primary disease than a constitutional reproduction of it.

We know, however, that *Epitheliomata* sometimes prove fatal in the way of putrid infection; and if I might venture to account for the malignant nature of the two cases detailed, I am inclined to believe that their type of malignancy is derived from the "*epitheliomatous*" nature of the primary disease.

3. The existence of the secondary nodular deposits constitutes a peculiar and remarkably interesting feature in both cases. In both they presented similar microscopic charac-

ters, and appeared to indicate the mode of death by way of putrid infection, and which is not an unusual termination to cases of "degenerate epithelial disease."

Dr. Laurie considered that the deposits in his case were "analogous to, or possibly the second stage towards, the formation of those circumscribed abscesses which are so frequent a cause of death in surgical and obstetrical practice." Such deposits, we know, are often perfectly independent of purulent infection, the occurrence of which is now doubted by some pathologists.

London, March, 1857.

THE LONDON PRACTICE OF MEDICINE AND SURGERY. HOSPITAL NOTES.

EXFOLIATION OF BONE AFTER COMPOUND FRACTURE.

Mr. Curling has under his care in the London Hospital some cases bearing with much interest on the question as to the length of time occupied by necrosed bone after compound fracture in becoming loose. In one, a healthy man, aged about 30, had a compound fracture of the leg. The case has done well, but now, after the lapse of ten months, there is still a fragment of dead bone exposed, but firmly fixed. In a much older man, who was recently under care, the exfoliation was complete in a third of the time. The difference between the two cases was, that in the first the portion of dead bone is attached to the lower fragment, and in the second to the upper one. Mr. Curling remarked that he had often noticed the very slow progress of separation in the lower fragment, which was no doubt to be attributed to its being ill-supplied with blood, since by the fracture the main supply, that namely from above, would be cut off.

REMOVAL OF CANCEROUS TUMOURS BY EXTERNAL APPLICATIONS.

That the removal of cancerous tumours by comparatively painless applications of very dilute caustic solutions is practicable is beyond doubt. We noticed, about six months ago, a case in which, by a diluted lotion of Sir William Burnett's disinfecting fluid, Mr. Stanley had removed a cancerous mass from the breast, with the result of leaving a clear and healthy sore. Since that Mr. Stanley has pursued the same plan in two or three other cases with perfect success. In one the skin was first removed, after congelation, by the knife, so as to admit of the application. In a case of rodent ulcer of the face in an elderly man, great benefit has also attended the use of the same solution; and the sore, which was large, has, to a great extent, cicatrised. The same application is being tried in a case of very extensive rodent ulcer of the face, under the care of Dr. Ramskill and Mr. Hutchinson at the Metropolitan Free Hospital.

USE OF OPIUM IN STRUMOUS OPHTHALMIA.

The employment of narcotics, as hyoscyamus or belladonna, in that form of strumous ophthalmia in which the intolerance of light is a prominent symptom, is an old and often very excellent practice. We notice that Mr. Critchett, at the Royal Ophthalmic Hospital, prefers the more direct anodynes, and generally uses the liquor opii. In the case of a child of four years old, who was admitted the other day, in whom the intolerance was extreme, this remedy acted like magic. On the second visit the patient could look full at the light. Amongst the concomitant symptoms which indicate the employment of opiates, irritability of the mucous membranes generally, and especially diarrhoea, are of much value. In some cases of strumous ophthalmia a brisk purgative should be the first measure employed. In a certain class the iodide of potassium is of the greatest use.

EXPECTED OPERATIONS.

At St. Bartholomew's, on Saturday, this day, there is a case of excision of the elbow-joint. At St. Thomas's, Mr. South has a case of removal of the breast for cancer. At King's College, Mr. Fergusson has a lithotomy, a case of perineal section, and three cases of plastic surgery. Mr. Bowman has a ligature of the femoral artery for aneurism. At St. Mary's, on Wednesday, Mr. Brown has a case in which a fibrous tumour of the uterus is to be enucleated.

AMPUTATION AT THE HIP-JOINT.

TABULAR REPORT OF EIGHT CASES OF AMPUTATION AT THE HIP-JOINT.

In 1846, when Mr. Sands Cox compiled his "Memoir on Amputation of the Thigh at the Hip-Joint," the number of recorded cases in which the operation had been performed was 85, the recoveries having been 27, and the deaths 58. Respecting a large proportion of these the details are very imperfect, and do not permit of any accurate comparison or arrangement into classes. A considerable proportion of the recoveries was in cases in which the operation had been performed for injury, and others (but a minority) were on account of tumours or other disease of the limb. In three

cases, of which Mr. Cox's was one, the part removed was the stump left by a former amputation of the thigh, and in all of these recovery ensued. It is manifest that in this class the operation would be a comparatively trifling one. As we have next week to record in detail the particulars of a case in which, a week ago, Mr. Stanley removed the entire limb on account of malignant disease of the femur, we take the opportunity of presenting in a tabular form the experience of the London Hospitals during the last four years in respect to this operation.

No.	Hospital, Date, etc.	Sex.	Age.	State of Health.	Nature of disease.	Duration of disease.	Mode of operating.	Progress.	Result.	Remarks.
1	Charing-cross: Mr. Hancock; 1852	M	35 (?)	Exceedingly reduced by erysipelas and advancing gangrene after compound fracture.	He had sustained a compound fracture of the thigh, and also of the arm, by jumping from a window. On the 17th day erysipelas set in, and gangrene followed, necessitating amputation.	3 weeks.	It was intended only to amputate through the thigh high up, but the bone being found fractured into the joint, disarticulation was performed.	He sank under the shock and died almost immediately after the operation.	Death.	In this case the operation was performed under almost hopeless circumstances.
2	The Westminster: Mr. G. J. Guthrie; 1853.	M	50	Tolerably good.	Malignant disease of the femur.	8 years.	Antero-posterior flaps by transfixion. Profuse hæmorrhage attended the operation. No vessels were tied until the removal was complete.	An attack of hæmorrhage occurred next day, and further exhausted him. He sank from loss of blood.	Death on the second day.	At the autopsy the bleeding was found to have been from a small branch of the circumflex.
3	The London: Mr. Adams; March, 1854. <i>Med. Times and Gaz.</i> , p. 349, April, 1854.	F	26	Thin and delicate.	Large fibro-cystic growth from the lower part of femur. Exostosis, suspected to be malignant, behind the trochanter.	5 years.	Antero-posterior flaps by transfixion. The amputation was completed before any vessels were tied, and the femoral artery then took precedence. The operation occupied less than a minute, and but little blood was lost. The femoral did not bleed in the least.	The patient was in a very satisfactory state when taken back to bed. She did fairly up to the fourth day, after which she got more and more feeble. Diarrhœa came on on the sixth, and the discharge from the stump was fetid. She sank, in spite of stimulants, on the eleventh day.	Death from exhaustion on the eleventh day.	The patient did not appear to possess sufficient vital power to originate the process of extensive repair necessary. The flaps had not united at all. The diarrhœa was probably symptomatic.
4	University College: Mr. Erichsen; March 31, 1855.	M	26	In good health previous to the accident, but in collapse from loss of blood.	Compound fracture of the thigh high up. The skin was not much injured.	2 hours after the accident.	Antero-posterior flaps by transfixion. The operation was quickly performed, and but little blood lost. The femoral was not tied until the vessels in the posterior flap had been secured.	He bore the operation well, but afterwards became restless and depressed.	Death about two hours afterwards.	Chloroform was given during the operation, but not to complete insensibility. It seemed to rouse rather than to depress. The femur had been broken about two inches below its head.
5	St. George's: Mr. Tatum; June, 1855.	M	17	In fair health, but losing flesh as the tumour grew.	Encephaloid cancer of the femur.	Seven months.	Antero-posterior flaps, the anterior one being much the larger. The femoral was tied after the completion of the removal, and no blood lost from it.	The lad was freely supported, and did well.	Recovered.	—
6	The London: Mr. Curling; March, 1856.	F	40	In fair health. Had lost flesh since the disease began.	Malignant tumour in the thigh, supposed to be connected with the femur.	Eight months.	The tumour extended too high up to allow of an anterior flap of any length being cut, a long posterior one was therefore made. Very little blood was lost.	Her progress was throughout very favourable.	Recovered.	The patient died about ten months afterwards, from internal disease, the cicatrix, etc. having remained quite sound.
7	Charing-cross: Mr. Hancock.	M	25	Emaciated and very feeble, from long-standing disease.	Necrosis of the femur extending into the knee-joint below, and up to the neck of the femur above. The whole thigh burrowed by sinuses.	4 years.	It was intended only to amputate through the thigh high up. The anterior flap was cut first, turned back, and the femoral artery secured before proceeding. It was then found that the necrosis extended into the neck of the bone, and disarticulation was performed. Very little blood was lost.	For a few days after the operation he was in a very feeble state, and had much diarrhœa and sickness. Stimulants were freely given, and he afterwards did very well.	Recovery.	The healing occupied about two months. He completely regained his health. The hip-joint itself was not diseased.
8	St. Bartholomew's: Mr. Stanley; March 28, 1857.	M	52	In fair health. A lean man, of small stature.	Medullary cancer (firm) of the femur, extending high up, and forming a large tumour.	1 year.	The anterior flap was cut from without inwards, and the femoral artery tied before disarticulating. Some difficulty was encountered in securing it, owing to the projection of the tumour upwards. Not much blood was lost.	He rallied fairly after removal to bed; but, about two hours afterwards, hæmorrhage came on, and he died in ten minutes.	Death from hæmorrhage two hours afterwards.	The diseased mass projecting so high up made the operation a somewhat prolonged and difficult one. The femur, up to its articular facet, was infiltrated with diseased structure and softened.

NOTES AND QUERIES.

He that questioneth much shall learn much.—*Bacon.*

No. 204.—THE DEATH OF A LIONESS, AND ITS SUPPOSED EFFECT UPON PREGNANT WOMEN.

There is a superstitious idea very prevalent, not only in Somersetshire but throughout the land, that the death of a lioness in England is the forerunner of evil to women with child. I should much like to know whence this absurd notion emanated. There have been many post-partum deaths lately in this neighbourhood, and more than one old woman has connected the fact with the death of some lioness, an account of which has appeared in the daily papers. I have even heard of a physician having gravely assured a bereaved husband that his wife's death was one of those which usually occur after a fatal leonine accouchement.

THE MOUSE IN THE PARTURIENT MOUNTAIN.

ANSWERS.

No. 197.—SWEATING SICKNESS.

Æsculapius will find a full account of the "Sweating Sickness" in the first volume, published by the Sydenham Society in 1844, entitled "Hecker's Epidemics of the Middle Ages." Ipswich, April 4, 1857. G. B.

No. 197.

For an account of the "Sweating Sickness," see John Caius's "De Ephemera Britannica," of which also translations have been published. For a complete account of the matter, Gruner's collection of writers upon the subject should be consulted. The following is the title of Haeser's edition: "Scriptores de Sudore Anglico superstites. Collegit C. G. Gruner. Post mortem auctoris adornavit et edidit H. Haeser. Jena, 1847." 8vo. J. C.

No. 197.

In reply to your inquirers (197, 199) in the last number of the *Medical Times and Gazette*, I beg leave to inform them that, first, the best account of the Sweating Sickness is to be found in "A Boke or Counsell against the Disease commonly called the Sweate or Sweatyng Sicknesse," made by John Caius, Doctour in Phisicke. Imprinted at London, A.D. 1552." This work is largely quoted by Dr. Babington, in his useful translation of "Hecker on Epidemics of the Middle Ages." Dr. Hecker has also written an account in German of the frightful scourge.

No. 198.—HAMPSTEAD WELLS.

The spring still exists, and is to be seen a few yards west of the Presbyterian Chapel, in Well-walk, Hampstead. The composition of the water is exactly of the same nature as the chalybeate at Tunbridge Wells, only that the proto-carbonate of iron is in greater excess in the former than in the latter spring. GEORGE CORFE.

No. 201.—HISTORY OF BLISTERS.

I do not recollect, nor has a hasty search enabled me to find any passage in the whole of Dr. Freind's writings, which would justify your correspondent W. M. in adducing the name of that learned Physician as his authority for a statement so manifestly incorrect as that which would assign the first introduction of blisters into medical practice to so recent a period as the latter half of the sixteenth century (1576).

Admiration of Dr. Freind's immense medical erudition, and respect for his memory, prompt me to venture a reply to your correspondent, who, I hope, will pardon me for suggesting that he has misinterpreted the distinguished author of "The History of Physick, from the time of Galen to the XVIth Century."

Archigenes and Aretous are probably the earliest writers who pointedly recommend cantharides as an epispastic in the medical treatment of disease.

Archigenes practised at Rome in the time of Trajan, A.D. 98—117. His writings, as a whole, have perished, but fragments have been preserved by Ætius, in his "Tetrabiblon." In these, we meet with two passages, where distinct mention is made of cantharides as a vesicatory. Thus, in the chapter De Resolutione ex Archigene (a), we read:—"Revocat autem

(a) Ætii Tetra. b. II. Serm. ii. cap. xxviii.; in Med. Artis Princip. vol. ii. p. 264.

sensus etiam thapsia cum aqua illita aut casu aceto post dropaces; item illitio ex cantharidibus." And, again, in the chapter headed "Communis Curatio Cephalæ et Hemieranæ ex Archigene et Galeno" (b):—"Nos autem utimus cataplasmate ex cantharidibus et mirifice facit dum per longum tempus ulcuscula hoc pharmaco fientia sanie manant. Oportet autem munitam esse vesicam per lactis potum ac irrogationes eo quod facile ab unguentis ex cantharide lædatur."

Aretous, who flourished probably in the second century of the Christian era, and was contemporary with, or at most a few years later than Archigenes, writes thus:—"Maxime omnium rubefactiones capitis usurpandæ, usitate quidem quascunque superias proposui sed his valentior est quæ e cantharidibus conficitur; tribus autem antea diebus quam his utamur ad vesicam tutandam bibatur hac quia cantharides magnopere vesicam rodunt." (c)

Blisters of cantharides, as we are told by Freind, (d) were also employed by Alexander Trallian in gout, where he says, by discharging a large quantity of serum, they give immediate relief. I pass unnoticed the slight mention of cantharides by Celsus, Pliny, Galen, and Scribonius Largus, all of whom seem to have limited their application to chronic diseases of the skin.

The employment of blisters appears to have originated in the sixteenth century, although, if we may trust to one authority, Dr. Glass, (e) they had been used in the plague by Ruffus Ephesius, a contemporary of Archigenes. Dr. Freind (f) fixes their introduction into Italian practice about the year 1576, and this is probably the passage to which W. M. alludes; but he will see, on a re-perusal of the chapter, that this date applies exclusively to the employment of blisters by the Italian physicians in plague and pestilential fevers. Dr. Freind assigns the merit of their introduction in the treatment of these diseases to Mercurialis, admitting, however, that within a more restricted scope they had previously been used and recommended by Jacobus de Partibus, Marcilius Ficinus, and Alexander Benedictus.

WILLIAM MUNK, M.D.

Finsbury-place, April 6th, 1857.

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Medical Times & Gazette.

SATURDAY, APRIL 11.

POWER OF THE ARMY MEDICAL DEPARTMENT.

OUR cotemporary, the *British Medical Journal*, in its number of the 4th instant, asks the question, "Is there such a thing as sanitary science in our Army?" and takes the opportunity to make an onslaught on the Army Medical Department, accusing the officers of sacrificing the soldiers at home and abroad, by their neglect of the light of modern science, and suggesting as a remedy the substitution of a Board for a Director-General. It is a pity our cotemporary had not studied the past history of the department, and taken some pains to ascertain the real facts of the cases he adduces in support

(b) Ibid. Caput L. vol. ii. p. 272.

(c) Ed. Kahn, p. 310.

(d) History of Physick. Part I. p. 99.

(e) Commentarii xii. de Febribus ad Hippocrates disciplinam accommodati. Svo. Lond. 1742. P. 219.

(f) De Febribus Commentarii, ix. Opera Omnia Medica. Fol. Lond. 1733. P. 294.

of his views, before he thus attacked a body of officers, of whom Mr. Sidney Herbert said:—"Every account I get says this, the Medical men in their vocation are beyond all praise . . . their humanity, their zeal, their energy, are mentioned by every one, friend and foe;"(a) and the Duke of Cambridge more recently bore strong testimony to their philanthropy and great exertions.(b) In the *Medical Times and Gazette* of January 13, 1855, we gave a short sketch of the administrative arrangements of the Army Medical Department since it first received a distinct organization in 1756. In this it was shown that, during the first fifty-four years of that period, it was governed by a Board; but so great were the disadvantages attending that system, that in 1810 the Board was abolished on the recommendation of a Parliamentary Committee, and a Director-General appointed as the responsible head. This condemnation of a Board was repeated by Mr. Stafford's Committee of last session, after a careful examination of the whole question.

Our cotemporary founds his charge against the Army Medical Department upon an abstract of a speech, delivered by Lord Grey in the House of Lords in April, 1854, on the subject of Army Reform, in which his Lordship pointed out the terrific losses of the troops by disease in Jamaica; their sufferings in the West Indies generally from improper diet, and the disgraceful state of the barracks and hospitals in that command. But had he carried his inquiries a little further, or consulted persons acquainted practically with the subject, he might have ascertained that the facts adduced by Lord Grey were all taken from the statistical reports on the health of the Army prepared by Inspector-General Marshall, since dead, Captain Tulloch, now well known as Colonel Tulloch the Crimean Commissioner, and Assistant-Surgeon Balfour, now the Medical Officer of the Chelsea Military Asylum. When these officers prepared their report, they did not content themselves with pointing out the evils, but suggested the remedies, which Lord Grey takes to himself the credit, and most justly, of having carried out. The very measure for which our cotemporary gives so much credit to Lord Metcalfe for having adopted in 1843, was strongly recommended to the military authorities in 1838 by the gentlemen above named. But to effect reforms in the Army is a more difficult matter than our cotemporary seems to think it. The plan then proposed of hutting the troops in the Blue Mountains interfered with the Royal Engineers' department, and was, for the time at least, overruled. The introduction of fresh meat rations in lieu of salt was resented by the Commissariat as trenching upon their province; and backed as they were by the Treasury—of which the Commissariat was then a branch, it required all Lord Grey's characteristic energy and determination to effect the desired reform. In like manner, when improvements in the barrack and hospital accommodation have been proposed by the Medical officers, difficulties have been constantly raised on the score of expense; and when they have been sanctioned, the Royal Engineers and the Barrack Department have adhered to certain red-tape rules, laid down by themselves, despite the remonstrances of Medical Officers of all ranks. Again, when troops take the field, the Medical officers are never consulted as to the suitable nature of the encampment ground; and we are aware of an instance in which the senior Medical officer was threatened to be put under arrest for having ventured to remonstrate with his commanding officer, when an unhealthy spot had been selected for that purpose.

For the consequences arising from this state of things it is the military and financial authorities who are responsible. The Army Medical Officers have done all in their power, from

the Director-General down to the Assistant-Surgeon, to have the evils remedied, and the condition of the soldier improved. But so long as they are refused the power to carry out their suggestions, and so long as their suggestions are unheeded by those who have the power, so long must the officers of the Department be exonerated from charges of the serious nature now brought against them. If our cotemporary will take the trouble to examine the question carefully, he will find that there has been no sanitary reformer who has worked harder than the late Dr. Marshall did to improve the condition of the soldier; and that foremost among the works on practical hygiene, whether British or Foreign, must be ranked those admirable Reports on the Health of the Army originally suggested by him, and prepared by him and his two colleagues, Colonel Tulloch and Dr. Balfour. Lord Panmure has already introduced some important modifications into the Medical Department, but much yet remains to be done in the way of granting it an efficient control in questions affecting the health of the soldier. His Lordship has not yet stated to what extent he means to act upon the recommendations of Mr. Stafford's Committee, but we trust he will never forget that prevention is better than cure, and that it is less expensive to keep a soldier efficient than to provide for and replace him when disabled. There is no more certain mode of doing this than by improving the condition and status of the Medical Officer, and giving him a practical voice and efficient control in all sanitary questions affecting the Army.

THE RELATIONS OF FOOD AND DISEASE.

In considering the subject of diseased animal food in our last number, we referred incidentally to the question, Whether diseased structures can or do convey disease to the human body receiving them as sustenance?

This question is one surrounded with difficulties. It must be met fairly and frankly, it must be answered scientifically, it must be answered positively.

Looking at the subject in its simple form, the evidence, *à priori*, would be strongly in favour of the suspicion that, by the medium of diseased milk as food, almost any poison may be transmitted from the body of one animal into that of another. Through her milk the syphilitic wet-nurse transmits in some cases the disease to the suckling child. Through the milk secretion every soluble vegetable and mineral poison is easily transmissible. We have ourselves thus detected the transmission of antimony, mercury, and iodine, from parent to offspring; and we think it possible that in one case of cholera in an infant at the breast, the disease was directly conveyed by the same channel from the suffering mother. If there be, then, any truth in these propositions, it should obtain that the milk of diseased cows, taken as it often is uncooked, must needs be a prolific source of disease in the human race.

But is it so in fact? Can fifty, nay, twenty, well-marked instances be adduced indicating that any disease has originated in the child, the man, or the woman, from the use of diseased milk? In what way does diseased milk act? Grant that a cow has cow-pox, is there proof that the drinking of such cow's milk will propagate to the drinker cow-pox, or small-pox, or any disease? Grant that a cow has typhus, will her milk convey typhus, or a modified form of it, to the human subject?

From fluid flesh to solid,—Can fifty, nay, twenty carefully observed instances be enumerated, in which from the eating of diseased flesh, well-marked signs of any special and communicable disease has originated? We have some positive facts about the sausage poison, but these, comparatively speaking, have sprung up accidentally; the symptoms have been such as isolate the cases from any general and classified

(a) British and Foreign Medico-Chirurgical Review, Oct. 1855, p. 302.

(b) Report of Committee on Army Medical Department.

disorder, and the poison itself is possibly generated in the process of decomposition in the dead substance.

Allowing for a moment that the flesh of diseased animals received into the human body has the effect of operating as a poison, what are the modifications of symptoms which it induces, as compared with the original symptoms in the diseased animal? What positive relations do the epidemics in the lower animals bear to the epidemics in man? What modifications in type are produced in the passage of the epidemic disorder from an animal of one class to an animal of another class? Some flickering light on this point, in reference to small-pox and the cow, and cow-pox and man, is all that relieves the darkness of science here at the present time.

Another point. We will not dream of going back to the efficient causes of epidemics; but we would propound this first and broad inquiry. Is the propagation of epidemic disorders limited to the animal kingdom? Are all the germs of epidemics formed and circulated only in the animal domain? Or does the epidemic phenomenon take a wider root; can it be traced back to the vegetable world? Again, can an epidemic arise spontaneously, as from causes external, *i. e.* independently altogether of the idea of simple propagation of animal or vegetable transmission? Can variations of heat, of electricity, of humidity, excite any special disease which, once communicated to man or animal, shall be communicable to other men and animals?

In the absence of labours bearing on these all-important and primary inquiries, the so-called science of epidemiology is no science at all, but a perplexing, chaotic record of confusion.

Returning to the question of diseased food, and assuming for the moment that contagious diseases are transmitted to man through this medium, what, we would inquire, are the circumstances which favour, what are those which hinder, such transmissions? Will a portion of the worst form of diseased food, after being subjected through its whole structure to the boiling temperature, by any possibility convey disease? Judging from experiments on the effects of heat upon small-pox virus, the answer, *à priori*, would be against such a proposition; but "the proof of the 'poison' lies in the eating," and the proof has not been given.

Assuming, further, that diseased animal food may, after exposure to heat, retain its elements of disease, the effect of digestion upon it must not escape attention. Snake poison received into the body through a wound soon does its work, but received into the stomach is simply innocuous. A prick from a needle charged with an infinitesimal dose of some unknown agent in the dead human body, is often a deadly, and is always a dreaded poison. Yet cannibals feast on their brothers, and are none the more unhealthy for the repast, or, at all events, are not poisoned. It would be rather difficult to suppose, after the experiments of Majendie, that putrid venison could be thrown into the body by inoculation without producing poisonous effects; yet your high venison eater takes with impunity an animal diet which, in the most literal sense, may be said to have been dead and alive again. We are informed by Professor Spooner, that he has administered the virus of glanders to animals, by the mouth, without any harm whatever resulting. But a point of this virus inserted into the flesh is sufficient to propagate the disorder in all in its virulence.

The contemplation of such subjects as those we have thus briefly sketched out suggests, doubtless, various perplexities, and the idea of an amount of work which must be anything but pleasant to the superficial and idle. Still, from what is known, little can be said at present regarding any of the difficulties referred to. Small-pox, in a modified form, may be transmitted to the human subject from the cow by inoculation; by the same process, glanders may be transmitted from

the horse, and rabies from the dog. These are, perhaps, the only *positive* facts we possess about transmission. Next, in their approach to a positive position, are the new and important views on the transmission of parasites. There are so many men who have agreed in observation, as in argument, on this point, and the evidence brought forward by them is so irresistible, that it must be well nigh conceded as a fact in science, that the entozoa are not only supported as a great family, but have also their diversities of race kept up by their constant migrations from one friendly animal to another.

We have evidence also that the cholera poison, whatever it may be in nature, is a thing; we know somewhat how it moves, we conceive that it makes water its chief vehicle, that it passes off in the excretions of the cholera patient, and that its pathological, or better, perhaps, its physiological effects, are analogous to those produced by some of our more active cathartic agents.

Hitherto we have gone, and no further. Beyond is the open sea and land unknown. Whoever, setting forth towards this unknown, shall, by design or accident, make new land, need not fear for his fate in history; a new world would not be a greater discovery, nor the fame of Columbus remain without its rival. Neither need we cease to live in hope for true discoveries in this direction. We are making immense strides in physiological research, and if in these the epidemiologist shall patiently follow, his success is secure. The question of the transmission of disease by diseased food is the topic of the day, and affords a grand opening for such investigations as have been glanced at above.

THE WEEK.

The Medical evidence at the trial of Thomas Nation for murder last week at Taunton must not be allowed to pass without criticism. The Medical points of the case were as follows:—A man had been murdered by having his throat cut. The prisoner was suspected, and in his pocket was a knife all over blood. There was blood upon his trousers' pocket and also on his hands. He said the blood upon his knife was attributable to his having cut some raw beef with it. Here is Mr. Herapath's evidence, as reported in the *Times*:—"Mr. Herapath stated that on the 31st of December he received a knife, smallclothes, black coat, shirt, waistcoat, and one legging. There was a smear of blood inside the flap of the smallclothes and many spots on the outside. There was a blood spot on the sleeve, two on the inside of the sleeve. On the shirt, three marks on the cuff of the right sleeve inside; on the left cuff many blood marks. On the waistcoat, blood in the right-hand pocket, a smear, and two spots. Afterwards received another legging, on which was a small smear of blood. Minute portions of blood were taken from the knife for purposes of examination. The blade had been immersed in living blood up to the hilt. The blood had not coagulated until it was on the knife. Blood from a human body would coagulate in about twelve minutes. Could not say positively from what animal the blood had come. The globules were the size of those of his own blood and of other men. Had compared them with the blood of the ox, the sheep, and the pig, and these globules were larger than those of either of the three animals. The difference in size was considerable. It was a received axiom in science. They were 1-3400th of an inch; of the ox, 1-5300th; the sheep, 1-5200th; of the pig, 1-4500th. The relative sizes would be as 53 to 34 of the ox, 52 to 34 of the sheep, and 44 to 34 of the pig. The inference was that it was not the blood of either of those three animals. They approximated nearly to the human blood. The blood of a man excited by drink would make no difference. He used strong microscopic power; the proportion would be an inch to thirty feet. Re-

peated the experiments many times with the same results. There were on the knife certain scales such as are found in the mucous membrane of the throat. They are a kind of empty cells. They were much larger than the globules of the blood, and were perfectly distinguishable. They were totally different to those of an animal. From the appearances, the knife had passed through the mucous membrane which forms the lining of the throat. There were a few fibres in the nail notch of the knife. They were fibres of cotton, and were as if the knife had passed through cotton twice. They were plainly visible with the microscope." On the part of Nation it was urged by his counsel, and proved in evidence, that on the day of the murder the prisoner had had three teeth drawn, that he refused to wash out his mouth, and that he left the shop of the dentist with his mouth full of blood. In this way the blood on the trousers was accounted for, and that on the knife by the assertion that it was not human blood. The Lord Chief Justice said, "It had been proved that on that day the prisoner had three teeth drawn. It would be dangerous, therefore, to attach any great importance to the fact of some few minute spots of blood being found on his clothes. But then came the knife. The question was, Was there blood found on the knife? Was it human blood? They would take the knife and look at it. Mr. Herapath had explained to them his view of it. He said it could not be the blood of an animal, as described by the prisoner. It excited surprise when they heard that he had eaten the meat raw. Still that might be so. But Mr. Herapath took upon himself to say it was not the blood of a dead animal. It was living blood, and it was human blood, and he had shown them the marvellous powers of the modern microscope. At the same time, admitting the great advantages of science, they were coming to great niceties indeed when they speculated upon things almost beyond perception, and he would advise them not to convict on this scientific speculation alone." Now we feel bound to say that the Chief Justice did right in cautioning the Jury against the acceptance of Mr. Herapath's pseudo-scientific evidence. It is really disgraceful that such one-sided, imperfect testimony should be given in a case where human life is at stake. The prisoner was condemned to death, and as the evidence was wholly circumstantial, the Jury appear to have been guided, or rather misled, by inaccurate scientific evidence. It is very questionable if it can be determined whether a knife has been dipped in blood in a living condition, or dipped in after the blood has coagulated, or has been stirred to prevent coagulation. We do not believe it possible to tell when, where, or under what circumstances blood has coagulated, if it be dried on a knife when presented for examination. The epithelial scales might be sworn to with more certainty; but we do not believe it possible to distinguish the blood of man microscopically from that of many other animals of his class. On the whole, we look upon Mr. Herapath's evidence in this case as most disingenuous clap-trap, and rather what we might expect to hear at some popular lecture, where the "wonders of the microscope" form the theme of declamation to a gaping audience, than the solemn asseveration on oath of a man of science in a court of justice.

Mr. Griffin continues to carry on his indefatigable crusade against the Weymouth Board of Guardians with great vigour and with partial success. He continues to expose the meanness and injustice of the Local Board, and to report faithfully its proceedings to the Poor-law Board, to the Profession, and the public. The Weymouth Guardians, irritated beyond measure at his indomitable perseverance, and feeling their inability to meet him with fair arguments, are of course, as is usual among similar bodies, anxious to dismiss him secretly

from his office: the Poor-law Board, on the other hand, though evidently disliking Mr. Griffin, and willing to allow him to be dismissed if it could be accomplished privately, is quite unable to devise any pretext for requiring him to resign, although it would, doubtless, be overjoyed if Mr. Griffin could be coaxed or bullied into so doing. Mr. Griffin has clearly the best of the argument; and his vigorous philippics, his unanswerable statistics, and his straightforward appeals, must be like gall and wormwood to the impassive placemen at Whitehall, who sometimes promise to take his letters "into consideration;" sometimes courteously beg for delay; and sometimes (and this is the most common course) take no notice of his communications at all. Mr. Griffin has just addressed to the Poor-law Board another letter, which, for vigour of style and clearness of argument, excels all his other productions. In this communication he recapitulates with great force the circumstances in relation to his duties at Weymouth, which are already known; as, for instance, the inequality of his payment compared with his duties and compared with the emoluments of the other district surgeons; he reminds the Poor-law Board that it possesses the power of controlling the proceedings of the Local Boards, and strongly recommends the exercise of that power in the present instance; he complains, not unreasonably, that his letters, which it was promised should receive early attention, have not yet been answered after the lapse of nearly a year; he recalls to recollection the large meeting of the profession in last May, and the more recent demonstration on the part of the Medical Students in London and in Edinburgh, and he reminds the Board that petitions from these bodies have been or are to be presented to Parliament; he records the fact that 290 medical officers of unions resigned their posts in 1855 and 249 in 1856, and he asks why the medical officers of the army and navy and those connected with galls, do not throw up their appointments in like manner, and why the clerks of unions retain their positions so much longer than the Union Surgeons? He also quotes the evidence given before the House of Commons, showing that 72 per cent. of all the paupers are made so by sickness, and hence he points out the importance of paying the medical officers sufficiently well to enable them to do their duty conscientiously to the suffering poor. "Can this be done," writes Mr. Griffin, "for 1s. 4½d. per case, or even at the average of 2s. 9¾d.? Would any member of your Honourable Board like to be attended during a month's illness for such a sum? To underpay your medical officers is false economy: humanity demands that the evils of the present system should be speedily redressed." We wait with considerable curiosity to learn what answer will be returned by the circumlocutionary officials of Gwydyr House to this admirable and argumentative communication.

The financial report of the British Medical Association for the past year presented by the Committee of Council shows not only that the whole income of the Association is absorbed by the expenses of its Journal, but that the income is inadequate to meet this expenditure. Notwithstanding a special call of ten shillings upon each member last year, the Association was in debt at the commencement of 1857 to the amount of £1003 11s. 5d. To meet these liabilities, the arrears of subscriptions and sums due for advertisements are stated by the Committee as follows:—

Subscriptions,	about	£650	0	0
Advertisements,	about	350	0	0

Total..	£1000	0	0
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So that, if every farthing of these subscriptions and debts be collected, the Association is still behind-hand. Out of

£2040 13s. 1d. expended in 1856, it appears that the whole was on the Journal account, with the exception of £50 Reform Committee, £12 circulars for special meeting, and £31 5s. 2d. for sundries,—or £93 5s. 2d. in all; while the liabilities on the Journal account on December 31, 1856, were £527 19s. 10d.; so that the expense of the Journal for the year has been £2475 7s. 9d., while the actual receipts for subscriptions due in 1856 were only £1565 1s. 6d. The British Medical Association is clearly, therefore, an Association whose income is almost entirely devoted to the support of a weekly Medical Journal.

We have received several communications on the subject of the late trial of Alfred Matcham for the manslaughter of a pregnant woman at Lowestoft in August last; and, although we have already adverted to the monstrous perversion of justice which has characterized this extraordinary case, yet we cannot refrain from reiterating our expression of indignation at the shameful manner in which the counsel for the prisoner thought proper to vilify the character and to impugn the motives of the highly-respectable members of our Profession who were called for the prosecution. Every recorded event has its private as well as its public history, and frequently this private history is more accurate and trustworthy than that which gains general acceptance. This remark is especially true of this case. The account of the affair derived from the record of the trial, would, without further explanation of the circumstances, make it appear that Matcham was, in some respects, as stated by the Judge, an ill-used man. The evidence, as it stands, no doubt conveys the impression that this man really possesses a New York medical diploma; that he is a successful and respected, though as far as England is concerned, an unqualified practitioner; that he has consequently become the object of envy and persecution among the Surgeons resident in Lowestoft; that the matter for which he was brought to trial was only one of those unfortunate accidents to which all men are liable, and that the whole course of the prosecution was conducted in an unfair manner, and by an unwarrantable combination. On the contrary, had the medical men of Lowestoft, who were spoken of by the Chief Baron as the instigators and conductors of this prosecution, really been so, it might have been proved from sources of information open to them, but unknown to the solicitors employed, that nearly every supposed fact or argument upon which the Judge so curiously directed the jury, was also a fabrication or a baseless piece of legal ingenuity. Thus it might have been and can be now shown by the clearest proof, that this pretender to medical equality can have no qualification, either British or foreign. He asserts that he possesses a diploma from some college in New York. He admitted at the inquest, in answer to a question put by one of the jury, that he had never been out of England, but that he was examined in London by some individual who gave him a diploma, and that his name appears on the British list of qualified practitioners. It might have been shown by the evidence of the chemist, who has since the trial issued an explanatory declaration, that it was at the husband's own request he sent for the Coroner, in order, as he expressed it, that his wife's friends might be satisfied. It can also be proved by the same declaration, that instead of being unfairly treated by the Coroner's jury, and excluded from the *post-mortem* examination, the constable was actually accompanied to the door of his house, and sent in with a special message, explaining what was about to take place, so as to give him the opportunity of either witnessing the operation or sending a deputy. It can also be shown by a declaration, unanimously signed by the jury, that from a sense of justice they deliberately selected Dr. Webb, of whose impartiality

they had long experience, to be present at the examination on Matcham's behalf; and that this choice of a representative was made spontaneously, without any reference to the other Medical men, and for the sole purpose of securing ample protection to an accused man. We may close this notice with a brief abstract of the Medical facts of the case. The instruments exhibited as having been used in the case were—a pair of straight, wide-shouldered forceps, usually known as Haighton's, and a common German-metal table-spoon. These forceps were introduced to manipulate with for the space of more than two hours, without any other result than the infliction of local injury; and the delivery at length took place coincidentally with the interference by means of the spoon. The larger wound, extending from the back part of the perinæum along the right labium and upwards through the vagina, was fully six inches in length; the smaller one, on the left side, corresponded with the size and shape of the handle of the spoon. All the pelvic structures were much ecchymosed, and showed marks of great violence. The only reasonable opinion as to operative proceedings was this, that one blade of the forceps must have been thrust into the vaginal wound, and the other passed on to the depressed uterus and its contents. In this way it may be understood how so much unavailing force was used, and so much injury done. The whole facts of this case are before the Society of Apothecaries, and it remains to be seen whether this body will perform the duty entrusted to them for the protection of the public.

At last, after nine months' delay, the Government has done something to prevent the importation of foreign cattle. An Order in Council, dated the 2nd of April, provides that "no cattle, and no horns, hoofs, or raw or wet hides, or skins of cattle, shall be imported or introduced into the United Kingdom, which shall come from, or shall have been at any place within those territories of the Emperor of Russia, or of the King of Prussia, or of the Grand Duke of Mecklenburg-Schwerin, which respectively are in or border upon the Gulf of Finland, or any other part of the Baltic Sea between the Gulf of Finland and the territories of the free city of Lubeck, or which shall come from or shall have been at any place within the territories of the free city of Lubeck." This Order is just such a blunder as might be expected from a Government acting under the advice of the Board of Health, with an Ordnance Clerk as its President, and a Comedian for its Secretary, and with undefined powers divided with the Board of Trade and the Board of Customs. Nine-tenths of the cattle imported into this country come from Hamburg, and the Order does not prevent importation from Hamburg, though it is known that a fatal epidemic is prevailing in the low lands about that city. Importation from Hamburg, our chief source of foreign supply, is now going on, while it is stopped from the shores of the Baltic, from whence the number of cattle imported is comparatively trifling. The Agricultural Society and Highland Society have taken an unexceptionable course, by appointing Professor Simonds, of the Royal Veterinary College, to go to the Continent immediately to investigate the subject at the spots where the disease prevails. It would be impossible to find a more competent man for the work.

The Government has the choice of two modes of impeding the introduction of the cattle plague from the Continent into this country—the one by forbidding importation altogether, the other by establishing quarantine regulations at our sea-ports. The former plan has been adopted, but to a very limited extent. If it were carried out to the degree in which

it could alone be of any avail, it would raise the price of meat in this country in a very appreciable degree. In 1856, 83,306 head of cattle were imported, 145,059 sheep, and 9916 pigs. Such a supply as this could not be cut off without a material advance in the market price of meat, as it is calculated that not more than two million head of cattle are annually slaughtered for consumption in Great Britain and Ireland. Absolute prohibition of importation, therefore, might be expected to raise the price of meat from 15 to 20 per cent. Even this would be far better than running any risk of infecting the eight or nine million head of cattle kept in these islands with a deadly disease. Then comes the question, Can we permit importation with safety? If we are to trust to simple inspection at the ports, the only answer would be, No. No inspection, however able or vigilant, can detect disease in its latent form; and an animal might arrive in this state, be passed as healthy, and the disease not show itself until some days afterwards. It is clear, therefore, that the only plan left is a system of quarantine. Sheds and pens should be erected on the Thames, at Lowestoft, and Hull, the three principal places of import, in which cattle arriving from the Continent should be kept for at least fourteen days before they are admitted into contact with other cattle. There would be many difficulties of detail in carrying out this plan, but they might all be met; and there is the question of expense, but this is a very minor consideration in comparison either with the loss which must ensue if the murrain attacks our flocks and herds, or with the increased price of food consequent upon a total stop to the Continental supply to our meat-markets.

The extraordinary general meeting of the Governors of the Royal Medical Benevolent College, held at the Freemasons' Tavern, in consequence of the increased annual charge for exhibitors, ended in a vote of confidence in the Council, and an expression of opinion that the annual amount of £40 charged for each exhibitor is just and reasonable. We think it a matter of regret that the resolutions were not put to the meeting, as the disposal of them by the amendment will not be looked upon as a settlement of the question. Those who were most in favour of the reduced payment were quite ready to join in a vote of confidence in the Council, while requesting them to alter a bye-law. There can be no doubt, from the feeling of the meeting, that the resolutions it was called to consider would have been negatived by a large majority, and the minority must have accepted the decision, while the course adopted will probably lead to renewed agitation.

The inquest upon the body of the woman supposed to have been poisoned by arsenic and antimony at Chorley has just terminated, and a verdict of Wilful Murder has been returned against the husband of the deceased. We alluded to this case last week, and described its principal features. The evidence adduced at the inquest only amplifies and confirms the statement which we then made. It was shown that the deceased and her husband lived unhappily together; and it would appear that the latter was an intemperate person. He was entitled to, and in fact received, money from various burial clubs, on account of his wife's death. The medical evidence was remarkably clear as to the fact of poisoning: the symptoms were precisely those which might be expected in a person who had swallowed antimony and arsenic; the body, when exhumed some time after death, was in an extraordinary state of preservation, owing, no doubt, to the antiseptic agency of arsenic upon the tissues. The portions of the viscera subjected to chemical analysis gave unmistakable evidence of the existence both of arsenic and anti-

mony; and Mr. H. H. Watson, of Bolton, deserves great credit for the careful manner in which he appears to have conducted the chemical investigation. We may state briefly that the arsenic was deposited upon copper by Reinsch's process, and the metal thus developed was heated and volatilized, and subsequently converted into arsenious acid: this latter was then dissolved and acted upon by ammoniaco-nitrate of silver, ammoniaco-sulphate of copper, and hydrosulphuric acid, which gave respectively the characteristic yellow, green, and lemon-yellow precipitates. The antimony, which was also deposited upon the copper, was boiled in a solution of permanganate of potash, with a little excess of potash, and then after being acidulated with hydrochloric acid, an orange-red precipitate was produced by hydrosulphuric acid. The latter precipitate was collected and dissolved by heating it in strong hydrochloric acid, and on adding water to the solution, a white precipitate of subchloride of antimony was obtained, which was again dissolved by the addition of tartaric acid. This series of tests proves beyond question the presence of arsenic and antimony.

REVIEWS.

Torquay in its Medical Aspect, as a Resort for Pulmonary Invalids. By C. RADCLYFFE HALL, M.D., Physician to the Torquay Hospital for Consumption. Pp. 165. London. 1857.

THE author of the little book before us has noted with much care and truthfulness the effects of Torquay upon the consumptive invalid. He states, that on first coming to Torquay the patients find the bowels acting with regularity; but that frequently, in a week or two, they become sluggish, the appetite flags, and the invalid feels a certain amount of *malaise*, and says he is bilious. Dr. Hall remarks that—

"This little biliousness is a sign that the climate is exercising a sedative influence upon his system, which is very salutary to his lungs, although leading to a little temporary indisposition in a new form."

Dr. Hall then proceeds to consider what affections are, and what are not likely to be benefited by a residence at Torquay:—

"An asthmatic invalid, meaning by this a person affected with the pure spasmodic form, is either exactly suited to Torquay or not at all. The trial is the only test. Another form of so-called asthma, which depends upon an emphysematous state of the lungs, in which the difficulty of breathing to some extent is permanent, is relieved by Torquay in proportion to the relief afforded by the climate to the bronchial irritation, which to a greater or less extent habitually accompanies this disease. . . . Pure atonic dyspepsia is made worse by residence in most parts of Torquay."

Chapter the third is devoted to a consideration of some of the local peculiarities relating to the climate of Torquay, which seems to have "not one climate only, but several climates," all partaking, however, of the general characteristic of being soothing to the inspiratory organs, but differing very considerably in their effects upon the nervous, digestive, and muscular systems. Dr. Hall informs us that,—

"As far as any general direction can be given, it is desirable to place a feverish consumptive case close to the sea, in some one of the most defended situations, provided the sea air, undiluted, is not known beforehand to disagree with the patient. When feverishness is less marked, and there is more danger to be apprehended from sinking of the powers of life, a situation part way up the hills suits better. . . . After a residence at the sea-level for some time, removal by degrees up to even the highest houses on the southern face of the hills, often proves more advantageous than a longer continuance in the part which was originally most useful."

It must excite the envy of the inhabitants of this metropolis, or any of our larger manufacturing towns, to read that there are no land-fogs at Torquay; and, that they there consider November to be one of the most delightful months in the year; days described in the papers elsewhere as dark, dense, and foggy, are bright and sunny, or, "at most, grey and

sunless" in this favoured locality. Dr. Hall, however, is of opinion that, as a general rule, a consumptive invalid had better not remain the whole year at Torquay; for it appears that after spending the winter at this place "the digestive organs will generally show signs of deficient energy," for which a change to an inland situation is the natural and appropriate remedy.

The hints on the pathology of phthisis, in the fourth chapter, invite the careful consideration of the Profession. Recent researches have led to the strengthening of the conviction, that the affection, at its onset, may either be, for the most part, local, or general; or, as our author expresses it, that "either the local state, or the constitutional state, may precede and occasion the other . . . The poverty-stricken blood may impair the healthy nutrition of the lung; . . . or, the impaired nutrition of the lung may be the first thing that occasions a deteriorated condition of the blood."—P. 59.

This work, from the pen of so accomplished a physician as Dr. Radclyffe Hall, is well worth the attentive perusal of those who, having patients labouring under pulmonary disease, think of prescribing a residence during the winter at Torquay.

Report of the Council of the British Meteorological Society, read at the Sixth Annual General Meeting. 8vo. pp. 48.

THE members of the British Meteorological Society have just been furnished with the above report; it contains much that is interesting, and from it we learn that this Society has succeeded in drawing the attention of government to their efforts, and that the Board of Health has deemed it necessary to supply its medical officers with instruments for making meteorological observations, nearly all of which have been supplied through Mr. Glaisher. We shall look forward with pleasure to the results of the joint labours of these gentlemen, and we doubt not, when they are analysed and then embodied, that many important facts will be brought to light.

The paper of the greatest practical interest to the physician is the one by Dr. Moffat, whose medico-meteorological labours are so well known to the profession. The subject of this contribution is the effect on the human system of certain conditions of the atmosphere, especially as regards the maximum amount of solids in the urine. Among our patients we often hear their descriptions of the effect of a *heavy* or a *light* atmosphere, and we know that, generally speaking, our feelings in this respect do not always lead us to judge correctly; inasmuch as the air which is really the lightest often impresses us with a sense of weight, and that which raises the mercury in the barometer renders us elastic and springy, giving us a notion of the *lightness* of the air, when really it is approaching its maximum of density. Now it is to the real effect of this difference in the weight of the atmosphere upon the system that Dr. Moffat has directed his inquiries, which have been carried on for the last five years at Hawarden.

Having ascertained that a certain relation obtained between several conditions of the air and the maximum amount of diseases and deaths, Dr. Moffat sought for a solution of this remarkable fact by examining their effect upon a healthy subject. He therefore selected one of a bilious temperament, whose occupation kept his mind and body well employed. He was exposed during all weathers for six or seven hours a day. In this subject Dr. Moffat examined minutely the effects of weather upon the amount of *solids* excreted by the kidneys. The results were remarkable. What led to this investigation were the facts which have already been before the scientific world, and which we will briefly give. Dr. Moffat finds that the *maximum of disease* occurs when the readings of the barometer and thermometer *decrease*, and when the wind blows from the points S.E. and N.W. by way of *South*, that is, when *ozone* is most prevalent in the air. The *maximum of deaths* occurs with similar readings of the barometer, but with the direction of the wind from the points between N.W. and S.E. by way of *North*, or when *ozone* is seldom present. From this it would appear that diseases require for their development a *light* atmosphere charged with *ozone*. Diminished pressure may act by itself as in cases of hæmorrhage, both passive and acute, or in concert with *ozone* and peculiar winds, when it brings about a certain amount of derangement in the system. Now, Dr. Moffat proves very satisfactorily that the very same atmospheric conditions which coincide with the maximum of diseases, induce the system to throw off by the kidneys the *maximum amount*

of *solids*, which fact, after giving us a detail of his experiments, he happily illustrates in the following manner:—

"Taking the adult population of London at two millions, and assuming that all the solids secreted by their kidneys are carried into the Thames, that river must hold in solution, or have suspended in its waters, a mean daily supply of 181 tons of solid urinary products. The quantity, however, varies with the weather; for, according to the above results, the Thames will contain 10 tons more on days when the readings of the barometer and thermometer are decreasing than when they are increasing; a daily mean of 3 tons more when the humidity of the air is decreasing than when it is increasing; 7 tons more on ozone days than when there is no ozone; about 10 tons more with south than with north winds, and a daily mean of 75 tons more during calm and gentle variable breezes than when there is a current of air. Let agriculturists bear in mind, that from the action of the kidneys alone of a London population 66,016 tons of British guano are annually swept into the Thames."—P. 27. Dr. Moffat does not state what the decreased reading of the barometer was owing to; whether from the density of the air being lessened in consequence of an unequal amount of the atmosphere being accumulated elsewhere,—which decrease indicates storms,—or whether they depend upon the adulteration and consequent lightening of the air by the addition of moisture. He, however, says that the amount of solids is greater with *dry* than with *moist* air.

The next paper is upon the relative value of the ozonometers of Schönbein and Moffat by Dr. Barker, from which it appears that Dr. Moffat's is the most sensitive. No important addition is made in it to our knowledge of ozone. The cumbrous, dogkennel-like ozone-box made at Uckfield was used during the investigation.

We have to congratulate the members on the beautiful illustration of snow crystals lately published by the Society, and the handsome bequest lately received from the executors of Henry Lawson, Esq., one of their vice-presidents, of whom an interesting memoir is included in the Transactions before us. Among other papers is one on Negrelli and Zampa's Mercurial Minimum Thermometer; and another on Weather in connexion with the Wheat Crop, by Mr. F. W. Doggett.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

CASE OF COMPLETE DISLOCATION OF THE CERVICAL VERTEBRÆ.

By Dr. AYRES.

THIS rare case occurred in the person of a labouring man, 30 years of age, having an unusually long neck, who, brought home in a state of intoxication, was supposed at first to be suffering only from a stiff neck. The case, however, looking more serious, the author was consulted on the ninth day. The head was found to be thrown back, and permanently fixed, and the anterior part of the neck, bulging forwards, was strongly convex, rendering the larynx very prominent. The integuments here were exceedingly tense and intolerant of pressure. The posterior portion of the neck exhibited a sharp, sudden angle at the junction of the fifth and sixth cervical vertebræ, around which the integuments lay in folds. It was difficult to reach the bottom of this angle, even with strong pressure of the fingers, and, of course, the regular line formed by the projecting spinous processes was abruptly lost. At this point he suffered great pain. He could only swallow small quantities of fluid, and that with difficulty. Some obstruction of respiration was present, which seemed to be due rather to the tense condition of the soft parts of the neck and not to pressure on the spinal cord, as no paralysis whatever was present. The sterno-cleido mastoids on both sides were soft and relaxed. "But one conclusion could be formed upon this state of facts, to wit: that the oblique processes of both sides were completely dislocated. The marked rigidity of the head seemed to preclude the probability of fracture through the vertebral bodies, and although the cartilage might be separated anteriorly, yet—the body not pressing backwards sufficiently to produce pressure on the cord—it was hoped that the posterior vertebral ligament remained uninjured."

Assisted by numerous consultants, who all agreed as to the

nature of the accident, Dr. Ayres proceeded next day to the reduction. "The patient was placed upon a strong table, in a recumbent posture, with a pillow resting under his shoulders, the head being supported by the hands during the administration of chloroform. Counter-extension being made by two folded sheets placed obliquely across the shoulders and properly held, the head was grasped by one hand placed under the chin, the other over the occiput, and by steadily and firmly drawing the head directly backwards, and then upwards, an attempt was made at reduction, but failed for want of sufficient power. Dr. Ingraham was then requested to place his hands immediately over my own in the same position as before, and steady traction was again made in the same direction. Our united strength was required in drawing the head backwards and upwards, to dislodge the superior oblique processes from their abnormal position. When this was felt to be yielding by Dr. Cullen (who kept one hand constantly on the seat of dislocation) Dr. Potter was directed to place his hands under our own, still in position, and assist in bringing the head forward; at the same time the chest was depressed towards the table. The bones were distinctly felt to slip into their places; the line of the spine was instantly restored, the head and neck assuming their natural position and aspect." All the patient could recollect respecting his accident was, that while going up a somewhat steep ascent he was struck from behind, over the lower portion of the neck, and fell forward against some object. The author refers to a case given in South's *Chelius* from Walther, as having determined his diagnosis and treatment of the present one.—*New York Journal*, Jan. Pp. 1—14.

STATISTICS OF THE MASSACHUSETTS HOSPITAL.

By Dr. KNEELAND.

DURING the preparation of an index of the Surgical records of the Massachusetts General Hospital, running over a period of twenty-five years (1821 to 1856), Dr. Kneeland has noted some statistical facts which he deems worthy of record.

Amputations of the arm 20 cases, of which 4 were fatal, but in 2 death was independent of the operation; of the *forearm* 18 cases and one death; of the *leg* 90 cases and 19 deaths, caused either by the severity of the accident, fracture of the skull, or other accompanying injury; of the *shoulder-joint* 6 cases and one death; of the *thigh* 97 cases and 26 deaths.

Ligature of Arteries.—The external iliac was tied in 4 cases, with 1 death in two days. The internal iliac was tied in 1 patient, who died in a week.

Cancer of the lower lip 58 cases, 5 only occurring in females. In most of the cases the habit of pipe-smoking was acknowledged. *Cancer of the tongue* 20 cases (almost always in the users of tobacco), 5 being females.

Epuhis.—9 cases, all women, whose ages varied from 51 to 59.

Fistula in Ano.—149 cases, of which only 14, or 1 in 10½ were females. This disproportion cannot be accounted for by the repugnance of women to submit such lesions to the Surgeon's notice in the Hospital, as none such is observed in the case of hæmorrhoids and other diseases of the rectum.

Fungus Hæmatodes.—17 cases, 6 occurring in males.

Hare Lip.—86 cases, of which 29 in females.

Hip-joint Disease.—181 cases, of which 63 females.

Lupus.—8 cases, of which 3 females.

Division of Nerves.—For obstinate neuralgia 9 cases, viz., facial in 3 cases, 2 relieved, and 1 not so; inferior maxillary, 1 case cured; inferior dental, 1 case cured; infraorbital, 3 cases, 2 cured, and 1 much relieved; and ulnar, 1 case relieved.

Stricture of Oesophagus.—14 cases, 3 in females.

Tetanus and Trismus.—8 cases, 7 of which proved fatal in from 2 to 19 days.

Torticollis.—18 cases, 5 males.

Occlusion of Vagina.—5 cases; operation in 3 cases, 1 being cured and 2 relieved.

Introduction of Air into the Veins.—2 cases; in one air entered while removing a tumour of the neck, and recovery took place; and in the other (fatal), it entered the axillary vein.

Suicidal Wounds of the Throat.—30 cases, 4 being females. Only 2 proved fatal. It is rare that the suicide effects his object, as the cut is usually made too high up and too much in front. By the time the skin is cut the pain prevents the completion of the act, the trachea being cut, but the great vessels escaping.—*Boston Journal*, vol. lv. p. 345.

FOREIGN CORRESPONDENCE.

FRANCE.

[From our Paris Correspondent.]

PARIS, March 29, 1857.

THE Ministry of War publishes in France every year two volumes of Medical Transactions, hardly known in scientific literature (a). The eighteenth volume of the second series of that periodical publication has just appeared. It contains several essays upon the diseases of the army, a subject just now of great importance.—1. The Medical history of the last encampments of Boulogne. 2. A notice of the epidemic typhus at the hospital of the Lazaretto of Marseilles. 3. A letter of Dr. Baudens upon the typhus of the Crimea. 4. Some remarks upon the treatment of typhus fever at Constantinople. 5. An account of the cholera of Varna. 6. Some remarks upon the use of the vapour-bath in the stage of collapse of cholera. 7. A notice of the cholera in the garrison of Nancy in 1855. 8. A report upon the use of biscuit in the army. 9. An unpublished report of the celebrated Parmentier upon the bread of the troops.

I cannot dwell a sufficient time upon each of these essays to give a complete account of them. I must say that all the Medical ones are deficient in precise data and good pathological knowledge. You will see that a Medical history of the army of Boulogne should give sufficient and scientific information upon the diseases which prevailed among the troops—cholera, scurvy, dysentery. The writer, Dr. J. Périer, the head Physician of the Army, does not seem to understand the value of such remarks. He relates at length all the incidents of the Emperor's journey to the camps and to Boulogne, the gracious shake of hands of the sovereign, the dinner parties at the imperial table. As for true pathological observations, I can find none; or, at least, they are so imperfect that they can be of no scientific avail. Positive data as to the origin of the diseases of troops in encampments are still completely wanting. No such information is to be had, unfortunately, in the history of the greatest encampment that has been made in France since the beginning of the century.

The letter of Dr. Baudens, Medical Inspector in the Crimea, upon "Typhus," is a brief account, which was first communicated to the Academy of Sciences, and which is full of good practical information upon the causes of typhus in the army, and upon the best means of preventing or stopping the development of that terrible scourge. How is it, then, that all these perfect hygienic indications were not enforced in proper time?

The unpublished report of Parmentier upon the bread of troops, is a curious and valuable historical document. It was read by Parmentier himself to the National Institute the 21st Brumaire of the fifth year of the republic.

The Concours at the Faculty of Medicine will be soon at an end; the subjects of the theses are now known. These compositions must be printed in a fortnight. They are as follow: 1. Comparison of Typhus and Typhoid Fever. 2. Expectation in the Practice of Medicine. 3. Metastases. 4. Palsies without Organic Impairment. 5. Diet in Acute Diseases. 6. Incubation in Diseases. 7. Diatheses. 8. Experimentation in the Practice of Medicine. 9. Comparison of Gout and Rheumatism. 10. The Causes and Symptoms of Albuminuria.

The last meeting of the Academy of Medicine will be recorded as one of the most painful in the history of that Society. The contest between Drs. Guérin and Malgaigne had been till then a scientific debate. Last Tuesday Malgaigne spoke in answer to Guérin with such an expression of personal hatred, with such a contempt of the rules of an academical discussion, that I doubt whether next week that dangerous question of the invention of the subcutaneous method will be taken again. For the readers of the *Medical Times and Gazette*, I give the opinion of the *Union Médicale* and of the *Gazette des Hôpitaux* about the speech of M. Malgaigne. The *Union* says, "If it is a duty for us to publish, as completely as possible, the oration of M. Malgaigne, we feel obliged to say, also, that his discourse has been this time the least happy and the least

(a) Recueil de Mémoires de Médecine et de Pharmacie Militaires, rédigé sous la surveillance du Conseil de Santé.

successful. We have seen with sincere regret the able orator lose his eloquence in personal recrimination. His speech produced upon all the assembly an unpleasing feeling." The *Gazette des Hôpitaux* gives the following opinion: "We give only the substantial and scientific part of the speech of M. Malgaigne. We leave to our readers the care of judging the question, in putting the mutual objections of the two opponents. We must say, also, that we have felt ourselves bound to suppress all the personal part of the discussion; more jealous of the dignity of the Academy than the Academy itself, we wish to spare our readers the painful feeling produced by that speech upon all those who heard it."

After that stormy sitting of the Academy, more than two hundred physicians of Paris joined at the Hotel de Louvre in the annual dinner party, called the Banquet of the Union. Dr. A. Latour, editor of the *Union Médicale*, founder of the banquet, was the chairman. The speakers were numerous. Dr. Michel Levy, president of the Academy, spoke upon the mutual dependencies of medical societies, and of the medical press. Mery, the ingenious writer, made a witty improvisation upon the banquet. A. Latour paid to Dr. Rayer a just tribute of praise for his great scientific zeal. Dr. Addison of London was present, as were several other learned foreign physicians.

Dr. Cl. Bernard has made, before the Society of Biology, new experiments upon the glycogenic phenomena of the liver. The learned physiologist has found, in the liver of dogs fed with meat, a kind of starch quite analogous to the starch of plants, and has proved thus the identity of the production of sugar in animals and in plants. This is another advance in the field of physiological discovery in which Bernard has taken so conspicuous a share.

GENERAL CORRESPONDENCE.

DIAGNOSIS OF THE PRETUBERCULAR STAGE OF PHTHISIS.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your report of the proceedings of the Pathological Society, at a meeting at which I was not present, Dr. Markham took occasion, from a case of his under discussion, to object to "such terms as *pretubercular* stage of phthisis." The objection rests, I understand, upon the belief that as tubercle has been found in the lungs without its existence having been ascertained during life, it is impossible in any case to affirm that tubercle does not exist; and he states, "that the absence of physical signs is no proof of the absence of tubercle in the lungs." If this mode of reasoning were applied universally it is manifest that we should have doubts in every thing; but whilst it is not required of any one to prove a negative, it is the practice to throw the onus of proof upon him who affirms the positive, and it is also the practice of the world to recognise the existence of such things only as give evidence of their existence. Thus, reasoning abstractly, if any one should object in any case to an assertion that there is no tubercle there, custom demands that he should prove that tubercle is there.

But, in so prevalent a disease as phthisis, surely an objector need not to rely upon metaphysical objections. When we have proved that tubercle is present are we not necessarily constrained to admit that there was a period when it was first deposited, and further, when it was not deposited? And do we not practically admit that a large portion of mankind have no tubercle? Need we, or do we, hesitate for life assurance, and similar purposes, to testify that persons are not phthisical? and if we may do this we may certainly be permitted to affirm that tubercle is not then present. A period in which tubercle does not exist in some persons must be admitted; and is it not to be presumed that those who now have tubercle might have been, and in fact were, of that number when they did not at the period referred to exhibit any of the signs by which we are enabled to affirm that tubercle does now exist? By what do we affirm the existence of any thing but by evidences which did not appear before its existence? and in a series of changes does not the positive evidence of one stage depend for its value chiefly upon the negative evidence of a former stage? Surely a state of the lungs without the existence of tubercle is practically admitted; and to state that we cannot prove the non-existence of tubercle is to do

that which science and reasoning have never required, and which only a distrust of an art, or [of our knowledge of it, induces us to object.

But I go further, and affirm that there are marks of this pretubercular stage which are as positive as are the marks of the tubercular stage, and that it rests with an objector to first make himself acquainted with them. It is unnecessary and theoretical to object that when the two stages merge the one into the other, the diagnosis may be impossible, as it is also irrational to object that this has ever been a source of dispute amongst physicians. The disease is progressive, and hence any period of doubt is limited in duration; and in like manner the science is progressive, and there is no reason why Dr. Markham should not make that plain now which was a mystery to men as talented as himself; but I venture to affirm that there is something wrong when it is stated that in a case in which "miliary tubercles were found thickly scattered through every tube of each lung," there was "nothing abnormal detected on a most careful stethoscopic examination" 17 hours before death. It is needful to know what is meant by "miliary tubercles," by "tubes of the lung" in relation to them, and by a "careful stethoscopic examination." The written explanation of Dr. Markham does not give this, for if a part of the lung be occupied by thickly-scattered miliary tubercles, it will contain a less volume of air, and although "healthy air-containing tissue might intervene," the relative proportions of æriform and solid contents of the lungs are altered, and the "percussion sound" must be altered also. So with the statement that the "respiration was loud and clear," the explanation that the respiratory murmur is clear because the air enters freely into the lungs, is opposed to the fact that the tubercle must have impeded the entrance of air at the points where it was deposited. To state that there is a deposition of solid material in parts which normally contain only air, and at the same time affirm that the air freely enters those parts, and that the "percussion sound" is unchanged, is opposed to all that science teaches, and fully justified Dr. Theophilus Thompson in his expression of surprise that in Dr. Markham's case the respiratory sounds were normal. With such views, I do not wonder that any one should object to a pretubercular stage of phthisis, or to any thing else. Skoda's opinion that isolated masses of tubercle cannot be diagnosed, is inapplicable here, since in the case which appears to have given origin to these objections, "miliary tubercles were found thickly scattered through every tube of each lung." I do not gather from Dr. Markham's statement that a question is raised as to the difficulty of diagnosing tubercle in an acute case apart from other deposits, but that there was no deposition of any kind which could be detected; nor that he considers the tubercle thus so largely scattered to have been deposited in the interval between the "careful stethoscopic examination" and the death of the child, or his objection would have been inapplicable, and he would have lugged in this objection to the use of a term in a subject foreign to it; but I understand him to state that he was unable to detect the "miliary tubercles scattered through every tube of each lung" seven-teen hours before death. I am, &c.

63, Grosvenor-street, W.

EDWARD SMITH, M. D.

March 28, 1857.

USE OF SULPHUR IN RHEUMATISM.

[To the Editor of the Medical Times and Gazette.]

SIR,—Among the amusements of Professional seniority may be reckoned the looking on at the strife of claimants for priority in discovering some old acquaintance among our ways and means of treating the ills that flesh is heir to. The letter of Dr. O'Connor in your last number is an instance in point. In the *Lancet* for March 7, 1835, (No. 601,) he may find a communication from Mr. Tucker, in which the treatment of rheumatism by the external use of sulphur, whether rubbed in dry or inclosed in boots and stockings, is recommended strongly by the results of detailed experience. During the last twenty years, I have ordered this application from time to time with varying success. Dr. Copland has given a summary of other old-fashioned modes of treating rheumatism by the external use of sulphur. I am, &c.

A HOSPITAL PHYSICIAN.

SULPHUR EXTERNALLY IN RHEUMATISM.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your last week's Journal is a letter from Dr. O'Connor, charging me with claiming originality in the practice of applying sulphur externally in rheumatism, and stating that I not only derived my knowledge from him, but had actually written to him so lately as March, 1856, begging him to give me information on the subject.

The facts of the case are simply these:—On the evening of February 25, 1854, I chanced to meet Dr. O'Connor in the street, close to my own residence. He told me that he was returning home from a meeting of the Medical Society of London, at which a paper on Sciatica had been read by Mr. Hancock. I thereupon expressed regret at having been unable to attend the meeting, on the ground that I should have liked to submit to the Society the details of a method of treatment (*viz.*, the external use of sulphur), which, to me at least, was new, and on which I was desirous of obtaining information. I then related how a patient, who was admitted under my care at St. George's Hospital in May, 1853, had first directed my attention to the remedy, and how successful it had proved in my hands. In reply, he stated that the treatment was not new; that he had long since employed it in every form of rheumatism, and had that very evening described its virtues in his speech at the Medical Society of London; and that certain Physicians at Edinburgh and Dublin had actually written and published on the subject.

So the matter rested until I was about to publish the second edition of my work on Rheumatism, Rheumatic Gout, and Sciatica, when, being anxious to consult the writings to which Dr. O'Connor had referred, with the view of obtaining additional authority for the practice, and recording all that was known on the subject, I addressed a polite note to him, (the note alluded to in his letter,) begging him to favour me with a reference to the works to which he had made allusion at our interview. That note—the only one I ever wrote to him—Dr. O'Connor had not the courtesy either to acknowledge or to answer; and now, by the publication of his letter, I am apprised, for the first time, of his having received it.

Having proved unsuccessful in my search for the writings, if any such exist, alluded to by Dr. O'Connor, and having failed to obtain from him any reference to them, I found myself obliged to state, as I have done in the second edition of my work, p. 456, that "in no recognised treatise with which I am acquainted do I find the slightest notice of the curative action of sulphur, applied externally," in the way I recommend; but, so far from claiming any originality in the matter, I stated on the same page, that "in many parts of England the sulphur ointment of the Pharmacopœia is a favourite remedy among the poor for the cure of rheumatism, whether affecting the joints or other parts of the body."

But now, Sir, that the question of originality has been raised, I will not hesitate to say, that I consider your reporter was quite justified in giving me a priority over Dr. O'Connor. Certain it is that Dr. O'Connor was present, and took part in the discussion on Mr. Hancock's paper in February, 1854, for the Journals report his speech on the occasion, though they do not make mention of his having alluded to the use of sulphur externally; and certain it is, that we do not find any record of his having so used it, until he referred to the fact in a discussion which took place at the Medico-Chirurgical Society in February, 1855, just two years after I had explained to him the mode of applying it, and the excellent results I had obtained from it; whereas those gentlemen who have watched my practice at St. George's Hospital are aware that I have constantly employed it since May, 1853, and my Hospital case books, which are open to inspection, bear witness to the same fact. Thus, then, as Dr. O'Connor does not even pretend to have made me acquainted with this mode of treatment before February, 1854, it is obvious that I, at least, am not indebted to him for the suggestion.

I will only add, that in a matter of this kind originality appears to me to be of little importance. I have no desire to lay claim to it, or to any merit beyond that of having placed before the Profession the carefully digested records of three years' observation on this plan of treatment. But I cannot imagine that any one will admit Dr. O'Connor's claim, after perusal of the facts recorded in this communication, and of the statement contained in his own letter, that "two Physicians, one of Edinburgh and one of Dublin," had written

many years ago on this very subject. From the day on which I first became acquainted with this application of sulphur, I spoke of it to all the Professional men whom I chanced to meet; and the only reason why I did not publish it before I issued the second edition of my work on rheumatism was, that I am always very careful not to advance anything which will not bear the test of experience, and that, until I sent my manuscript to the printers, I did not consider that I had had sufficient opportunities of observing its action to justify my expressing an opinion in its favour.—I am, &c.

HENRY WILLIAM FULLER, M.D. Cantab., F.R.C.P.L.

Physician to St. George's Hospital.

13, Manchester-square.

PERINEAL SUTURE FOR THE RELIEF OF PROLAPSUS UTERI.

[To the Editor of the Medical Times and Gazette.]

SIR,—I observe that Mr. Fergusson has recently performed at King's College Hospital the operation for the relief of prolapsus uteri, which has been repeatedly described in your pages as performed by me, and a full account of which will be found in my work; and in his observations appears to elaim the merit of the operation for Dr. Savage, as being somewhat of a novel one, and does not in any way allude to me or to my operations. I wish, therefore, to assert at once my claim to be the first English Surgeon who performed it, and who has through good report and evil report advocated and performed it, and on all occasions brought it under the notice of the Profession. When I first performed it many years ago, I did not know that any other person in the world had done so. However, after I had brought out my work upon the subject, I learnt that Dr. Fricke of Hamburg had performed one of a somewhat similar character. I was also informed by Dr. Savage that it had been performed by Dr. Geddes of America in a more radical manner than myself, as he took away much more tissue. However, at the time I proposed mine I did not know of either of these two. My operation has since been recognised and performed by many men, including Dr. Simpson of Edinburgh, Teale of Leeds, Dr. Fünke of Frankfort, Drs. Savage, Tanner, and Barnes, and Messrs. Borlase Child and Spencer Wells in London, as well as many others both in Germany and America, all of whom have constantly spoken of myself as the original advocate of the operation, and acknowledged its efficacy as well as certainty. I would also wish to observe, that very few cases require so complete a closure of the vagina as appears to have been done in the two cases operated on by Mr. Fergusson, as it renders it impossible for the woman again to become pregnant, or to be delivered, whilst by performing it on my plan, both can take place without detriment. Many of my cases have subsequently become pregnant, and been delivered without any tearing or rupture of the newly-united parts, and to all intents and purposes as well as though no operation had been performed.

I am, &c. I. BAKER BROWN.

Connaught-square, April 6, 1857.

RESULTS OF AMPUTATION AT THE ANKLE-JOINT.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the number of the *Medical Times and Gazette* for 28th March, I observed that Mr. Haynes Walton had stated at St. Mary's, "that from what he had seen he thought the operation of amputation of the ankle-joint would eventually be abandoned: he said that although the stumps are exceedingly good-looking ones, he never met with a case where they were really useful, and that the stumps were too tender to allow of pressure." I refrained from writing last week, in hopes of some one having more experience of the operation replying to his assertions, but as no one has done so, I must now state that I have seen a good number of people after amputation at the ankle-joint, and not one of them, that I can remember, either complained of tenderness or any unpleasant feeling in the stump. One case occurred in my own practice, now nearly four years ago, when, in consequence of a railway accident, I required to remove both feet, one partially by Chopart's operation, the other at the ankle-joint. I see the woman very often; she is able to move about and look after the little shop which she keeps, without either crutches, or

any support except her pair of boots, which were made on purpose. She never sees me without thanking me for the operation, and more especially for the ankle-joint one; as she says, if anything, it is the best of the two. I saw her yesterday, and questioned her very particularly; she says, from the day she began to walk (about two months after the operations) up to the present time, she has neither suffered from pain, tenderness, nor any unpleasant feeling in the stump. I think gentlemen in private practice have more opportunity of witnessing the ultimate results of their operations than those in hospitals, who perhaps never see their patients again after leaving. Hoping these remarks may elicit further observations from other quarters,

Moffat, Dumfriesshire,
April 4, 1857.

I am, &c.

JAMES MUNRO, M.D.
Surgeon.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, March 17.

Dr. QUAIN presented for Dr. Peacock and himself their report on Dr. Markham's specimen of

DISEASED HEART.

The report stated that the specimen submitted for examination had been a good deal injured by previous inspections. So far however as it was possible to judge, there was nothing abnormal in the cavities, the valves, the inlets or outlets of the heart, save the open foramen ovale and the band stretched across it, as described by Dr. Markham. They were unprepared to say how far this malformation was capable of producing the morbid sound described by Dr. Markham.

Mr. CHRISTOPHER HEATH showed a specimen of

CHRONIC RHEUMATIC ARTHRITIS OF THE HIP-JOINT.

This preparation was removed from a subject in the dissecting-room of the Westminster Hospital. The subject was a male, aged 71, and the only history that could be obtained was, that he had been bedridden for four years, and had suffered from rheumatic pain in the hip for many years previously. The acetabulum is considerably enlarged; over a large portion of it the cartilage is absorbed, and the bone eburnated. There are no remains of Harveian gland or ligamentum teres, and the usual bony markings were absent. The cotyloid ligament was much thickened and flattened at its outer part, thus forming a considerable portion of the cavity of the joint. At the upper part was a projection of new bone, from the brim of the acetabulum, and the head of the femur is enlarged and elongated, and in its centre the articular cartilage is wanting, and the bone is eburnated.

Dr. HAWKSLEY exhibited a specimen from a case of

MALIGNANT DISEASE OF THE LARYNX.

Mrs. M., aged 51, in good health. Last June (*i. e.* seven months prior to her death) she was attacked by a severe cold and sore throat, the tonsils being much swollen. After this she became hoarse, and two glandular swellings in the neck appeared. The sore throat, &c., subsided, but the difficulty of swallowing, together with a gradually increasing impediment to the breathing, continued. Five months afterwards Dr. Hawksley saw her for the first time, and she then presented a most emaciated appearance, her breathing being very quick, and both inspiration and expiration being accompanied by a loud, shrill, croupy sound. She had great difficulty in swallowing. She had some little pain in the larynx, particularly at night, and the same region was tender to the touch. She spat up daily a large quantity of clean, jelly-like mucus, which exhibited under the microscope abundance of epithelial particles, in some instances blood-cells, sometimes pus globules, but always numerous cells, more or less epithelium-like, but closely resembling the hastily and over-developed forms common to the different varieties of malignant growth.

The physical examination of the chest, which was carefully made, failed to discover any pulmonary disease. The symptoms went on getting worse until the dysphagia became complete, and she sank seven months after the commencement of the disease.

At the *post-mortem* examination nothing remarkable was discovered, excepting a tumour in the larynx. It was about the size of a large filbert, and its structure was fused into the

neighbouring tissues, especially those of the pharynx, comprehending the attachments of the superior and middle conductors, so that the coats of the tube were thickened and matted together. An elliptical ulceration occupied the under surface of the epiglottis, and extended down to the inferior vocal cord. The tumour was connected to the right ala of the thyroid and to the cricoid cartilages, uniting them into an inflexible mass. By microscopic examination (Dr. Brinton and Dr. Hawksley) the tumour was found to be undoubtedly cancerous. Large aggregations of cells were seen compressed into irregular forms by close packing, and exhibiting appearances of a more or less complete degeneration of their contents. Many of them, however, still contained nuclei, and had elongated processes of great delicacy, which appeared to unite with those of adjacent cells into a rudimentary fibrous network. The contents of these cell masses were composed of ordinary fibrous cancer, mingled with the elements of the original areolar tissue, the yellow or elastic fibres being extremely distinct and natural.

Dr. W. OGLE exhibited for Dr. J. C. Webb

A SALIVARY CALCULUS.

The patient, aged 30, a German of regular habits, has never smoked. For the last two years has suffered from general debility. Sixteen years ago he first felt a small lump in the left submaxillary region. With the exception of occasional pain, referred to the angle of the jaw, and relieved by gentle pressure, and by inclining the head downwards to the left, and outward, it did not give him much inconvenience till lately, when the under surface of the tongue became sore and excoriated.

On March 1 he complained of sore throat, the tonsils were found enlarged; on the 5th he found a hard substance working its way out of Wharton's duct on the left side of the frænum linguae. It came away readily; no blood or other discharge followed. There was neither fistula nor abscess; the swelling of the gland is gradually subsiding. The calculus is about three-quarters of an inch in length, is of the thickness of a small goosequill, and consists of concentric layers.

Dr. GRAILY HEWITT exhibited a specimen of

MALFORMATION OF THE HEART.

The heart exhibited was taken from an infant who died excessively wasted, about four months after birth. The pulmonary artery is quite obliterated at its junction with the right ventricle, is about the size of a raven's quill, and divides into two vessels of unequal size, one of which probably opened into the aorta; this was not, however, verified, the heart not having been examined *in situ*. The two ventricles opened freely into the aorta, and, by a deficiency in the upper part of the ventricular septum, into each other. The aorta was large, and provided with three large loose valves. The foramen ovale, as is usual in such cases, was open. The right ventricle was as large, or larger, than the left, and its walls had a maximum thickness of two-fifths of an inch. During life a loud systolic murmur was heard over the front of the chest, the respiratory murmur was feeble, absent at certain situations; the skin remarkably white, its temperature very low, and the body excessively emaciated. Cyanosis was rarely present, and scarcely ever to a marked degree. The lungs were found after death, as was expected, but little expanded, large portions of them (nearly the whole of the left lung) being in the condition known as atelectasis. This kind of malformation has been described by Farn, Peacock, and others; and in most of such cases the lungs have been found to receive a supply of blood through the ductus arteriosus, which remains pervious.

(To be continued.)

ARMY MEDICAL AND SURGICAL SOCIETY.

FEBRUARY 7.

THE third meeting of the above Society took place on Saturday evening, the 7th of February, at the Society's new rooms, 32, Sackville-street, Piccadilly, when Dr. Jephson, Surgeon of the King's Dragoon Guards, introduced the subject of gunshot injuries of the head; in illustration of which, eleven cases were detailed, which with one exception had been under his care in the General Hospital at the Castle, Balaklava. The following is an abstract of the paper:—

Abstract of Cases of Fractured Skull, with Depression, showing the results of Trephining, at the Castle Hospital, Balaklava.

Number.	Name.	Nature of injury sustained.	* Bones fractured.	Amount of depression on external examination.	Period elapsed from receipt of injury to admission.	Period under hospital treatment previous to trephining.	Symptoms present at the time of trephining.	State of internal table at the seat of injury.	State of dura mater at the seat of injury.	Operation followed, or not, by fungus cerebri.	Result of Case.	Condition of dura mater and cerebrum in fatal cases.	Period after operation when death occurred.
1	Collins.	Shell.	Right parietal.	Extensive.	3 days.	5 days.	Of compression.	Depressed and splintered.	Lacerated.	Yes.	Died.	Dura mater sloughy and cerebral abscess.	5 days
2	Handcock.	Grape.	Left parietal.	An inch below the level of sound bones.	3 days.	5 days.	Of phrenitis.	Much depressed and splintered, and lying loose on dura mater.	Suppurating	Yes.	Died.	Dura mater absorbed where injured, cerebral abscesses	11
3	Perkins.	Grape.	Right parietal.	No depression.	3 days.	5 days.	Of phrenitis.	Splintered, lying loose on dura mater.	Separated from the skull by a clot.	No.	Recovered.	—	—
4	Leary.	Ball.	Right parietal.	Very slight depression.	1 day.	4 days.	Of phrenitis, with spasms of left arm, mouth, and left eye.	Splintered and much depressed.	Thickened, coated with lymph.	Yes.	Died.	Dura mater thickened by lymph, fungus, and cerebral abscess.	9
5	Evans.	Explosion.	Left parietal.	Depressed.	4 days.	30 days.	Stupor and paralysis of right side of face.	Splintered.	Coated with lymph.	Yes.	Recovered.	—	—
6	Cain.	Musket ball.	Right parietal.	Depression from presence of bullet.	23 days.	26 days.	Febrile excitement and delirium.	Depressed and splintered.	Lacerated, and ball lodged in brain.	Yes.	Died.	Dura mater sloughing, with cerebral abscess	2
7	Scrubbins(a)	Pieces of stone.	Coronal suture.	No depression.	6 days.	23 days.	Of compression.	Internal table of parietal splintered, loose pieces on the dura mater.	Suppurating	No.	Died.	Dura mater dead, with cerebral abscess.	7
8	Deverill(b)	Musket ball.	Right parietal.	Much depressed and comminuted.	—	5 days.	Of phrenitis.	Splintered and depressed.	Dura mater and middle meningeal artery wounded.	Yes.	Recovered.	—	—
9	Perry(c).	Musket ball	Occipital.	Depressed from the presence of a bullet.	Some days.	3 days Castle Hospital, but wounded 5 days previously.	Fever and severe pain at the seat of injury.	Splintered.	Healthy.	No.	Died.	Natural.	19
10	Mackenzie.	Conical piece of wood.	Right parietal.	Considerable depression and comminuted fracture.	7 days.	11 days.	Of phrenitis.	Depressed and firmly fixed.	Uninjured.	No.	Recovered.	—	—
11	Page.	Shell.	Frontal.	Much depressed and fractured.	Some days.	3 days in Castle Hospital and wounded some days previously.	Convulsions and paralysis of right side.	Large piece depressed.	Much lacerated.	Yes.	Died.	Cerebral abscess.	—

(a) Died of fever.

(b) Wounded at Chillianwallah.

(c) Died of exhaustion from fever, to which he was liable prior to injury.

The author, in allusion to the cases detailed, remarked that one of them (No. 8), was, he believed, the first recorded of trephining being performed over the middle meningeal artery as it runs in the bony canal, in the anterior inferior angle of the parietal bone. The dura mater and this artery were lacerated by the fractured bone. The artery bled freely for some time, but was easily restrained; and the result of the case showed that the fear of hæmorrhage need not deter the Surgeon from operating over its course. This man recovered although the dura mater was torn, and a large fungus protruded from the brain; and he continued alive and well last year.

Most of the cases he thought showed that it was quite impossible to estimate the amount of internal injury, either of the internal table or other internal structures in cases of fracture from a musket ball, by any external characters of the fracture. In all the cases adduced pieces of bone were detached from the internal table; and in illustration of this point, cases 3, 4, and 7 were the more remarkable, as there was little or no depression, and the detached pieces lay quite loose on the surface of the dura mater. In case 7 the loose piece may have had some connexion with the clicking sound heard on pulsation of the brain. In all the cases the internal table was much more extensively injured than the external. In cases 6 and 9 balls were found within the skull, one of which rusted and compressed the left side of the torcular herophyli, and the other was found about

an inch in the substance of the brain, having penetrated the dura mater, but it was not discovered till twenty-three days after he was wounded, and in the former case it was not discovered till eight or ten days after. In case No. 10, a large piece of bone was turned edgewise, pressing down the dura mater nearly an inch; and in order to remove it, a second application of the crown of the trephine was necessary. In four of the cases, the dura mater was lacerated. In all the cases loose pieces of sharp bone lay for days on the dura mater, producing irritation and inflammation of this membrane and deposition of thick lymph-like matter, as observed in cases 1, 4, and 5, and thick purulent matter as observed in cases 2, 6, and 7 at the time of operation. As to whether the operation of trephining ought to be performed in cases of slight or inappreciable depression from injuries received in action, partaking of the nature of punctured fractures, before specific symptoms set in, or whether it should be delayed until such symptoms manifest themselves, are questions which the relation of these cases will perhaps determine. M. Stromeyer, in some remarks which have been published in Rankin's abstract for June last, states "that during the three years which he attended the Hospital practice in Vienna, London, and Paris, he did not meet with a single case in which the operation of trephining the skull had been successfully resorted to, and recommends that nothing should be done, except the employment of antiphlogistics, and especially of venesection. The eleven cases adduced might, in the opinion of the author, be termed secondary

operations, as none were operated on before the fourth day, and not until symptoms appeared calling for the necessity of its performance. No case had come under his notice, where the trephine had been employed immediately after the receipt of the injury, before symptoms of irritation, or inflammation of the brain or its membranes, had supervened or had had time to be set up. Only one of these cases (No. 8) was under the author's care from the time of being wounded; the others having been from three to twenty-six days wounded before they were sent to the Castle Hospital. Three other cases of fracture of the skull admitted were not operated on, but were treated by antiphlogistics, cold to the head, and mercury to salivation; and they all died of cerebral abscess. In one of the cases, a piece of the internal table was found in the cavity of an abscess at the seat of injury, about the size of a walnut. He was wounded on the 16th April, and lived till the 6th of May. The other two were pretty similar. The author alluded to one case of recovery from fracture of the skull, where the frontal and parietal bones were both depressed at the mesial line. He was wounded on the 16th of May, and pieces of bone were coming away till the 30th of June. He had no head symptoms of any kind. The fracture was much comminuted, and the pieces were easily detached by suppuration. As far as he could ascertain from the men themselves, in none of the 15 cases mentioned were there any head symptoms for some days after the date of the wound. In the one case last mentioned there were no head symptoms at any time; the proportion of cases of fracture where symptoms appeared immediately on being wounded to the cases where no head symptoms appeared could not be ascertained, as the former were treated in the front, and could not be sent to the General Hospital, seven miles in the rear. Of the fifteen cases, four were not operated on, three died, one recovered; eleven were operated on in consequence of symptoms of compression or inflammation, and to remove balls; four recovered, and seven died—one of the latter was from exhaustion from fever, which he was liable to previous to admission. How far different the result would have been if the rule in surgery, regarding the immediate operation in punctured fractures of the skull, had been adopted, as laid down by most authors (and fractures from balls partake of the same nature), not according to any set of symptoms, but from knowing the almost certainty of there being loose and sharp pieces of bone irritating or sticking in membranes more disposed to inflammation of the worst form than any other in the body, and which, if allowed to remain, are almost certain to be followed by irritation and inflammation, and ultimately by suppuration of the dura mater or brain, it was impossible to say. In some of the cases detailed, where men walked to the hospital and showed a small scalp wound, with a fracture of the skull and little or no depression, and stated that they felt a little dizzy when struck by the ball, but were quite well then; or, in such a case as that of a Captain of one of the Cavalry regiments, who was wounded at the charge of Balaklava, the fracture being very slight, and with no head symptoms. He was sent to Scutari, and was walking about as usual in a month afterwards, when he fell down in a fit of convulsions. He was trephined by Staff-Surgeon McIlree, and a small spicula of the internal table was found sticking through the dura mater. He died, as the operation was performed too late, and suppuration to a great extent had taken place. Dr. Jephson considered it was difficult to know how to proceed in such cases, as few men had the moral courage to tell the patient he must be trephined; and he believed that it would be the better course to have pursued in any one of these cases apparently the most likely to get well, without an operation. He believed that many were deterred from this operation by the unfavourable results given in different surgical works. In Erichsen's work, it is stated that of forty-five cases reported by Dr. Linton, as having occurred in the New York Hospital, in which, however, there appears to have been no distinction made between the trephine and other instruments, such as the elevator, or Hey's saw, only eleven, or one-fourth, recovered. Of six cases which had occurred in the University College Hospital, where the trephine had been used by Mr. Cooper, Mr. Liston, and Mr. Erichsen, only one patient recovered; one died of injury of the spine unconnected with the operation, and the remaining four died of inflammation of the brain. Nclaton says that all cases of injury of the head, in which the trephine has been used in the Parisian hospitals during the last fifteen years, have terminated fatally. From the observa-

tions made by the author of the paper he was not disposed to look upon the operation in so unfavourable a light as these extracts would make it appear. Of the eight cases operated on by the author, one half only died. In one of the cases Hey's saw was used, and in the other the trephine.

(To be continued.)

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 3d inst. :—

BLACKMORE, H. P., Salisbury.
CARTER, A., Jamaica.
COCKERTON, R., Girton, Cambridgeshire.
FOXWELL, J. J., Bristol.
HARRIS, L., Broadhempston, Devon.
HOWKINS, T., Spaldwick, Huntingdon.
KERNAN, G. D., Liverpool.
NEAL, J., Birmingham.
PEPPIN, H. C., Martock, Somerset.
SILSTER, W., Bridgton, Glasgow.
THOMAS, H. O., Seacombe.
THOMAS, J. L., Carmarthen.
WILSON, J., Whitby.

The following gentlemen were admitted members on the 6th inst. :—

BARRETTE, W., Bath.
BATE, G., Plymouth.
COCKCROFT, G. E., Middleham, Yorkshire.
EDWARDS, T. E., St. Mary's Hospital, Paddington.
EVANS, H., Blaenant, Cardigan.
FARR, G. E., Woolwich.
FISHER, J., Manchester.
GARLICK, W., Leeds.
MICHAEL, D., Swansea.
PAULI, T. J. W., Oxford.
PAYNE, G. B., Knutsford, Cheshire.
POPE, J. J., Mornington-crescent.
RUTTLEDGE, T. E., London Hospital.
SAUNDERS, R. W., Pisa, Tuscany.
STEVENSON, N., Bayswater.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, March 26.

BARNES, HERBERT SEDGWICK, Chelsea.
BLACKMORE, HUMPHREY PURNALL, Salisbury.
BLANDFORD, GEORGE FIELDING, Fifeild, Wilts.
BRIDGER, JOHN, Newick, Sussex.
CAIRD, WILLIAM EDWARD, Exeter.
CARR, WILLIAM THOMAS, Newcastle-on-Tyne.
CASANOVA, JOHN NARBERT, London.
DEVONSHIRE, CHARLES JAMES, Hampton, Middlesex.
DRESSER, WILLIAM, Coventry.
LEWER, ROBERT, Army.
PATRICK, JARMAN, Kent.
POOL, WILLIAM BROOKS, Canterbury.
PRALL, SAMUEL, Rochester.
SKINNER, DAVID SHORTER, Headcorn, Kent.
TATHAM, JOHN, Burton-in-Lonsdale, Yorkshirc.

Also, on Thursday, April 2 :—

CLARK, THOMAS EDWARD, Cotham, near Bristol.
JAMES, MOSES PROSSER.
TAIT, GREVILLE EWING, Heytesbury, Wilts.

DEATHS.

GRANT.—April 4, aged 65, George Grant, Esq., M.D., R.N., of Richmond-hill, Surrey, beloved and deeply lamented. M.D. Edinburgh, 1824; L.R.C.S. Edinburgh, 1811; Surgeon R.N., 1813.

LAON.—February 13, at Allyghar, Graham Lacon, M.D. Surgeon of the 9th Native Infantry.

NASH.—March 28, at Mount-place, London Hospital, London, suddenly, from excitement when visiting his son,

who was dangerously ill, Dr. Nash, of Pound Close House, Chilton Polden, Somerset, late of Kingsdown House, Box, Wilts, aged 58. M.D. King's College, Aberdeen, 1853; M.D. Erlangen, 1850; M.R.C.S.E., 1847; L.S.A., 1848; late Resident Medical Superintendent, Kensington House Asylum.

THORP.—April 1, at Maldon, Essex, aged 80, Mr. John Thorp, M.R.C.S., L.S.A., 1823; Union Medical Officer.

MEDICAL REFORM.—Mr. Napier, in his speech at the Trinity College election, said, "In the medical men we have had the votes of men amongst them of the highest stamp and position. There is a Medical Bill of Reform, which I did not speak of before. I was selected in the last parliament as one of three to carry it out, and I hope I will have an opportunity very soon of showing my gratitude to those gentlemen for their cordial support."

THE QUEEN'S HOSPITAL, BIRMINGHAM.—Retirement of Dr. Fife.—At a special meeting of the Council of Queen's College, held on April the 3rd, the resignation of Dr. Fife, one of the physicians of the Queen's Hospital, was received, and entered on the minutes. It will be seen by advertisement that candidates for the appointment are requested to send in their testimonials on the 30th of April; that the Council are pledged, in accordance with the fundamental laws of the College and Hospital, without favour or affection, to elect the candidate best qualified and most eligible, whoever he may be, and that canvassing, either personally or through friends, is strictly prohibited, and will be held to be an entire disqualification. In addition to the usual routine, the successful candidate will be required to give practical instruction at the bedside, to the student.

THE LATE DR. BALL.—Referring to the death we recorded last week, a correspondent writes—"The cause of Dr. Ball's death has been ascertained to have been a rent of about an inch in length in the aorta, close to the heart, hæmorrhage taking place into the pericardium. His case was curious, as he was found insensible on Friday morning, rallied, said to Dr. Aquilla Smith, "I feel I have got a death shock; you will see what is wrong here," pointing to his chest; was apparently moribund that night; rallied again, seemed pretty well on Monday morning, and died that night. He was fifty-five years of age. His funeral was attended by the members of the Royal Irish Academy, Royal Dublin Society, etc."

IMPERIAL SOCIETY OF MEDICINE OF TOULOUSE.—As the subject of their prize of 300 francs, to be decreed in 1858, the Society proposes the following subject:—Furnish an analysis of *Arnica montana*; describe the pharmaceutical preparations derivable from the various parts of the plant; and establish its physiological and therapeutical properties.

PRIZE QUESTIONS AT THE BELGIAN ROYAL ACADEMY OF SCIENCES.—The following questions are proposed for 1857:—1. Exhibit, by means of new experiments, the influence which the great sympathetic nerve exerts on the phenomena of nutrition. 2. Describe the mode of reproduction and development of the *Noctiluca miliaris*. The prize in each case is a gold medal, 600 francs in value. The memoirs, legibly written in Latin, French, or Flemish, to be forwarded before the 20th of September, addressed, post-free, to the Secretary, M. Quetelet, Brussels.

PROFESSOR OWEN AND THE CUVIER PRIZE.—The following is a translation of the letter of thanks addressed to the *Académie des Sciences* by Professor Owen:—"The Academy, in honouring my efforts for the advancement of comparative anatomy and zoology, by this distinction has conferred upon me the most flattering recompence I could aspire to. What approbation, in fact, would be of value in my eyes compared with that of this illustrious body, whose labours have placed the double science of zootomy and zoology upon the most solid foundations, and have imparted to it a rapid and well assured progress? Nothing less than a basis thus broad, and an activity thus constant and well directed, would have sufficed for the permanent establishment of a new science, the glory of France, and her celebrated Institute. The name attached to the prize with which I have been honoured enhances its price to me, since it is the name of the great man who is the creator of the science of palæontology. It vividly recalls to my mind that happy period of my life when I studied the

principles of comparative osteology in the *Jardin des Plantes*, and learned in the galleries of the Museum, under the eye and often guided by the voice of Cuvier, how to make their application to palæontology. To the direct teachings of that great man, and to those which I have derived from meditation upon his immortal writings, I owe a great portion of the success I have since achieved. I thus owe to France a double debt of gratitude for the recompence she has this day conferred upon me, and for the acquisition of knowledge which has rendered me deserving of this honour."

THE COWPOCK IN ALGERIA.—The French Minister of War has just ordered to be paid to M. Renucci, a colonial practitioner near Constantine, the premium of 250 francs, which had been offered for the discovery of cowpock. In May last, M. Renucci observed it on a cow, and immediately inoculated a new-born infant with the virus. The operation was quite successful, and other infants have been successively vaccinated.

MORTALITY NOTABILIA.—In the week that ended on Saturday the total number of deaths registered in London was 1235, of which 620 were deaths of males, and 615 those of females. In the ten years 1847-56 the average number of deaths was 1192, but for comparison with the deaths of last week, which occurred in an increased population, the average must be raised proportionally to the increase; in which case it will become 1311. The deaths now returned are therefore less by 76 than would have occurred if the average rate of mortality had prevailed.

The deaths from pulmonary diseases, which in the two previous weeks were 292 and 278, were last week 264, the corrected average for the ten weeks corresponding with last week being 273. Bronchitis, one of the diseases in this class, was fatal in the last three weeks in 164, 160, and 130 cases, showing a decline with the higher and steadier temperature of last week. Hooping-cough numbered 64 cases, which differs little from the numbers returned in many previous weeks. Small-pox, scarlatina, and diarrhœa exhibit a low mortality, the deaths from them being respectively 2, 12, and 7.

BIRTHS.—Last week the births of 936 boys and 902 girls, in all 1838 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1555.

METEOROLOGY.—At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29.334 in. The mean temperature was 47.8°, which is 4.2° above the average of the same week in 43 years. The mean temperature was above the average on every day. The thermometer in the shade rose to 58.4° on Friday, the highest point in the week; the lowest temperature was 40.1° on Wednesday. The mean dew-point temperature was 42.7°, and the difference between this and the mean air temperature was 5.1°.

DEATHS IN PUBLIC INSTITUTIONS for the Weeks ending Saturday, April 4:—

	Males.	Females.	Total.
Workhouses	41	66	107
Prisons	7	..	7
Military and Naval Asylums	5	..	5
General Hospitals	44	30	74
Hospitals for Special Diseases	4	5	9
Lying-in Hospitals .. ..	..	1	1
Military and Naval Hospitals	6	..	6
Hospitals for Foreigners, etc.	2	1	3
Lunatic Asylums	3	1	4
Total	112	104	216

THE following are the number of Deaths from Small-pox, Measles, Scarlatina, Hooping-cough, Diarrhœa, and Typhus, in the several Districts of London, for the past Week:—

	Popula- tion.	Small- pox.	Measles.	Scar- latina	Hoop- ing- Cough.	Dia- rrhœa.	Ty- phus
West.....	376,427	..	6	..	13	2	2
North	490,396	2	9	4	14	1	7
Central ..	393,256	..	6	1	11	1	6
East	455,522	..	8	5	11	..	9
South	616,635	..	5	2	15	3	10
Total..	2,362,236	2	34	12	64	7	34

ORIGINAL LECTURES.

CLINICAL LECTURES

ON

DISEASES OF THE SKIN.

ILLUSTRATED BY COLOURED ENGRAVINGS.

By WM. JENNER, M.D.

Physician to University College Hospital, the Hospital for Sick Children, etc.

LECTURE IV. (a)

ECZEMA.

ECZEMA is a very common disease. It is characterized by the eruption of small vesicles on imperfectly defined patches of skin, of some extent. The vesicles are usually pretty thickly set. Each vesicle is surrounded by more or less inflammatory redness. Sometimes the redness around the vesicles is scarcely perceptible, sometimes the whole skin between them is uniformly red, hot, and swollen; in the latter case, however, we can always find at the margin of the patches detached vesicles, each having its areola of redness. When the vesicles burst, thin scales or scabs cover the surface of the patches. These scales or scabs are composed of epithelium, and the fixed constituents of the fluid of the vesicles. When the fluid in the vesicles contains but little animal matter, then the scales are thin, white and opaque, and the disease may be mistaken for one of those belonging to the order Squamæ.

When the fluid of the vesicles contains much animal matter then the scabs are brownish or yellowish in hue. Still bear in mind that the scabs formed from the drying up of a crop of the vesicles of uncomplicated eczema are never thick. The disease may disappear with the drying up of the first crop of vesicles, as was the case on the girl's hands who lately lay in the last bed in Ward 3, but this is by no means constantly the case. Two, three, or more crops of vesicles may follow each other in quick succession, and the surface on which they are seated may be red, and raw in appearance, and a clear serous fluid, strongly alkaline in reaction, ooze from it in considerable quantity. This fluid excites inflammation of the surface over which it flows. It scalds, as it is said. Instead of being raw in appearance, it may be that the surface is hot, red, and swollen, and just under the cuticle you see perfectly flat irregularly shaped collections of serosity, or of somewhat purulent looking fluid. The appearance is as if turbid serosity or thin pus were burrowing in all directions just under the epidermis. I have always found the fluid in this as in other forms of eczema, alkaline. Scabs of large extent, but still thin, are formed by the drying up of this subcuticular fluid.

Where the cuticle is rather thick, and the vesicles are very small, the surface may seem to be red and rough only, with cracks here and there from which a more or less alkaline serosity oozes in small quantity. The surface thus affected is often of considerable extent. It is a common form of eczema on the anterior aspect of the leg in persons past the middle period of life. The urine of those who suffer from it often contains a large quantity of the crystals of oxalate of lime. As to the nominal varieties of eczema, the disease is called Eczema vulgare or simplex, when the vesicles are distinct from each other, though pretty closely crowded, last a few days only, and then dry up and form furfuraceous scales; the inflammation of the cutis in E. simplex is never very severe, and may be trifling. E. simplex may be excited by any direct irritant of the skin, as, for example, a stimulating liniment, exposure to the direct rays of the sun, or of a strong fire, sugar, sulphur.

Eczema rubrum is distinguished from E. simplex by the degree of inflammation that accompanies the eruption; the cutis between the vesicles is uniformly inflamed; Eczema simplex may therefore pass into Eczema rubrum. In Eczema rubrum the cutaneous and subcutaneous tissues are often considerably swollen; the swelling is, for the most part, due to the effusion of serosity.

When the surface is highly inflamed, the secretion here and there purulent, and at places distinct pustules form,—when the disease is vesicular here, and pustular there,—when there is a combination of eczema and impetigo, it is difficult to say to which genus the case should be referred; and, therefore, we call the disease Eczema Impetiginoides.

The face, the hairy scalp, and the skin behind the ears are all common seats of eczema; but there is no part of the trunk or extremities which it may not, nay, does not frequently affect.

Before and during the period of the first dentition eczema is by far the most common of the diseases of the scalp. If a single crop of vesicles only appear the disease will run its course in a week or ten days, but if crop after crop of vesicles follow each other, or if the surface is highly inflamed and “weeps,” the disease may continue for a considerable length of time. When very obstinate, lasting for years, it has been called eczema inveteratum. Strumous children, from five to twelve years of age, are very liable to eczema of an obstinate character at the flexures of the elbow and knee-joints. One of the children now in the theatre is suffering from this form of eczema. An acute attack of eczema is sometimes preceded for a day or two by tolerably severe febrile disturbance. There is nothing characteristic, however, in the febrile symptoms; but the patient who has had one attack being very liable to others, he may suspect its nature. Sometimes, too, he feels before the eruption appears a peculiar heat and tingling of the part about to be the seat of the eruption.

Parts affected with eczema burn, tingle, and itch; but the heat and tingling are usually much more marked than is the itching. Some local varieties of eczema, however, are attended with most troublesome itching; thus in eczema of the anus, of the labia in women, and of the scrotum, especially in old men whose urine dribbling away irritates that part, the itching is often intolerable.

Eczema is not contagious.

In children, as a rule, eczema is secondary to some constitutional state. In adult age it is more commonly due to direct irritation. In females it now and then appears in connexion with derangement of the catamenial function, without known local exciting cause. Eczema of the lower extremities is sometimes secondary to a varicose condition of the veins.

Under the name of Eczema you ought to know that the great German Dermatologist Hebra includes several forms of Impetigo.

In the treatment of an acute attack of eczema you must be guided by the severity of the local affection, the presence of febrile disturbance, and the age and strength of the patient.

If the disease be acute, the local affection extensive and accompanied by a good deal of heat, redness and swelling, and the patient in the prime of life and robust, the best treatment is to take a moderate quantity of blood from the arm, to give a brisk calomel and colocynth purge, to follow this by a saline antacid aperient, and to bathe the part itself with tepid goulard water. After the bowels have been freely acted on, small doses of antimony may be given every three or four hours. The diet in such cases should be low. If the patient be less robust, then the bloodletting must be omitted, and the purging and other treatment be less active.

If the disease be chronic, and the inflammation moderate in degree, a bitter acid aperient, such as sulphate of magnesia one dram, dilute sulphuric acid 10 drops, infusion of gentian 1½ ounce, two or three times a day, is often very useful. Young children require occasionally a calomel and jalap aperient at bedtime. In the chronic forms you must be careful to ascertain that the patient is committing no error in diet. It is only in the aged or the delicate that stimulants, as wine or beer, are admissible. Slightly astringent local applications, as zinc ointment, are the best for mild cases. If the disease be very chronic, and there is little heat of the part, stronger local means are required, such as an ointment composed of ½ a dram of the hypochloride of sulphur to 1 ounce of simple cerate, or a scruple of iodide of sulphur to ½ an ounce of simple cerate. In the strumous variety I mentioned as so common, at the bends of the elbows and knees, and in that in which the cuticle is rough and cracked, and there is serous fluid oozing from the surface, a piece of linen soaked in a solution of nitrate of silver, a scruple to an ounce of water, may be applied twice a day. When, in the last-mentioned form, the urine contains a very large quantity of oxalate of lime crystals, the nitro-muriatic acid, with decoction of bark and a good

(a) Dr. Jenner has not thought it necessary to give an engraving with this Lecture.

diet, should be prescribed. In strumous children, cod-liver oil and a good diet are essential to the cure. You must be careful to examine the state of the gums in young children suffering from eczema of the scalp, and if they be hot, dry, and swollen to lance them. If the disease continues, and the inflammation does not involve the cellular tissue, I have seen the disease rapidly yield to the plan of treatment recommended by Hebra. The hair being removed by a fine pair of scissors, and the scabs removed by linseed meal, or bread and water poultices, linseed oil is to be applied at bed-time to the whole scalp, and the following morning the part is to be covered with liquid pitch; a single application is sometimes sufficient for the cure; when the pitch peels off, the scalp is found free from eruption or inflammation. You must be very careful not to employ so stimulating an application as liquid pitch, if there is much heat and swelling of the part, for I once saw a child nearly killed under such circumstances by the inflammation set up by the pitch. The inflammation extended from the scalp, down the neck, and even below the clavicles. Abscesses of some size formed in the cellular tissue of the inflamed parts. However, when the child recovered from the terrible disease excited by the pitch, it was free from the eczema. It had been suffering from the affection of the scalp for two years; sometimes it was almost well, and then again, without apparent cause, an acute attack supervened and the child was as bad as ever; the cure effected by the pitch was permanent. In very obstinate cases, in children as well as adults, arsenic administered internally exerts a decidedly favourable influence. I give three or four minims of the liquor potassæ arsenitis in a little water three times a-day to an adult, and a single minim to a child.

Parts affected with eczema should be washed frequently. Strong soaps should not be employed. Some Physicians recommend the patient to use a little bran-water only; others employ egg instead of soap for washing the part. It is desirable to prevent the secretion from the inflamed surface running over the adjacent healthy skin; therefore let the part be wiped gently with a piece of soft lint from time to time. Dr. Bennet speaks in very high terms of the advantage he has seen follow from keeping the part constantly wet with a solution of subcarbonate of soda two drachms to a pint and half of water. To prevent the lint drying it is necessary to cover it with oil silk or gutta serena.

You will observe that in general terms the treatment of eczema may be thus summed up. If the local affection be manifestly inflammatory, you must first treat it altogether independent of the special eruption. When the active inflammatory stage has passed by you must apply stimulating astringents locally, and treat the constitutional derangements as though there was no local affection; and lastly, these means failing, you resort to those remedies which may be denominated empirical. Always bearing in mind the importance of a diet regulated according to the age and general powers of the patient, and the necessity for local cleanliness.

HERPES.

Herpes is also a very common non-contagious vesicular disease. It differs from eczema, however, in several particulars. The vesicles are arranged in groups on small, or at least not very large, pretty well defined, and somewhat elevated red patches. The vesicles of eczema are always small; those of herpes usually of some size. Usually, I say, for by and by I will bring before you some cases of one of the most common forms of herpes, in which the vesicles are invariably so small that it requires a very sharp eye to detect them. The size and shape of the red patch, and the size of the vesicles in herpes, then you will remember vary much.

The fluid of the vesicles is at first quite transparent, but it soon grows opalescent or puriform, and after a short time the fluid and the epidermic covering of the vesicles concrete into a thin, pale brownish scab. When quite transparent, I have found the fluid of the vesicles slightly alkaline or neutral to test paper, when opalescent, neutral or acid. I have never observed the fluid of the vesicles in herpes to have that strongly alkaline reaction so remarkable in the transparent fluid that "weeps" from the red surface of a patch of eczema.

You must have repeatedly noticed the red, slightly elevated patch that so often forms on the lip during that little feverish attack commonly called a cold; and you must have noticed, that shortly after the redness appears, a crop of vesicles covers the patch. In a day or two the vesicles are replaced by a thin,

brownish scab; in two or three days more the scab falls off, and a red stain only remains. This affection is Herpes labialis. When such an eruption occurs on the prepuce, as it often does, it is Herpes præputialis. Patches identical with these, except that they are broader, and that the vesicles on them are larger, may appear on any part of the body, constituting Herpes phlyctænodes. The cheek is a common seat of Herpes phlyctænodes. Several patches often appear in the vicinity of each other. Red patches, such as I have just described, as large as the palm of the hand, appeared on the upper part of the outer aspect of the thigh of the man who lay in the last bed in Ward 4; after a few hours these red patches were covered with vesicles of some size. I told you at the time that the case was one of Herpes phlyctænodes; we saw, you will remember, the red patches and the vesicles form under our eye. The disease ceased in that case, as is the rule, in less than a fortnight. Sometimes, indeed, a week suffices for it to run its course.

Herpes zoster, Zona, or Shingles, as it is vulgarly called, is distinguished from the other varieties of Herpes by the number and position of the patches of vesicles. Several patches, distinctly separated from each other, appear at the same time or in succession. These patches are usually oval, and arranged on a line passing somewhat obliquely downwards and forwards from the spine to the middle line in front. Most commonly they are seated on the thorax, next on the abdomen, and very rarely, as in the woman from whom this plate of Cazenave's was taken, on the face and neck. The patient is usually poorly for two or three days before the vesicular patches show themselves; sometimes considerable febrile disturbance precedes the eruption, and occasionally the patient suffers severe burning pain in the part where the eruption is about to appear, and even deep-seated pain in the chest when the thoracic parietes are to be its seat. Not long since I saw a lady, of about 60 years of age, at the request of her son, a Medical man; she was feverish, and complained of very severe pain in the left side of the thorax. During the night the pain had been so severe as to deprive her of sleep. She described it as being sharp and stabbing in character, and increased by deep inspiration. There was no eruption on the skin, and no physical sign of pleurisy, the disease from which her son feared she was suffering. There was no distress in ordinary breathing, nor was the pain on deep inspiration such as one would have expected had the terrible pain in her side been due to pleurisy. The next day several red patches appeared on the painful side, and were by the patient supposed to be the effect of a mustard poultice applied the evening before. At my visit the following morning the patches were covered with the large vesicles of Herpes, and the patches formed a semicircle round the trunk extending from the spine behind to the middle line in front. I mention the case to prevent your confounding the neuralgic pains that in some cases precede the eruption of Herpes zoster with pleurisy.

At first the contents of the vesicles is transparent, then turbid, and then thin brownish scabs follow. The disease runs its course in ten days or a fortnight. In rare cases, after the scabs fall off, the part on which they were seated is for some time the seat of severe neuralgic pain.

Herpes zoster affects young children much more frequently than it does adults. No age, however, is exempt. In children and young or middle-aged adults it is a disease, medically speaking, of little moment. You have seen me treat many cases. A mild aperient and a simple saline have been all I have given the patient. No local treatment is required. Nay, local applications very often seem to do harm. Herpes zoster is an acute disease, having a definite course and duration; a disease that, if let alone, is sure to get well, supposing the patient not to be very old or infirm. The vulgar have an idea that if the disease passes round the body death from it is certain; and in some parts of the country the poor regard it as a most serious disease. I remember when in Sussex many years ago I had charge of a pauper child who lived five miles away from me. I did not pay it a second visit for several days after the first. The child was dead when I called; an attack of convulsions had carried it off. I was sadly blamed by the parents. I do not suppose, however, that the Herpes and the convulsions had any relation in the way of cause and effect. They were merely coincident. Gangrene of the parts affected in very rare cases follows in infirm, aged persons.

The neuralgia which now and then occurs as a sequel to the eruption, is best treated by local anæsthetics, as belladonna.

As to the pathology of Herpes zoster, I think, with many others, that the eruption is secondary to a general febrile affection, and that the seat of the eruption is determined by the distribution of particular nerves, and most commonly of the dorsal nerves. The pain that precedes the redness, the limitation of the disease to one-half the body, the frequency with which it follows the course of some of the dorsal nerves on the thorax and abdomen, and even the fact that in some cases the upper arm has formed, so to say, part of the semi-circle, all point to this conclusion. In reference to these last facts you may remember that the lower intercostal nerves supply cutaneous branches to the abdominal integument, and that the second dorsal nerve supplies a branch to the skin of the upper arm, viz., the intercosto-humeral.

Why the febrile disturbance that constitutes the primary disease should be followed by the special local cutaneous affection we know not, any more than we know why the febrile disturbance which we call measles is attended by an exanthema different from that which occurs in the febrile disturbance of scarlet fever, or why ulceration of the small intestines occurs in typhoid fever, and not in typhus fever.

Herpes iris is a very rare affection. Each patch is about the size of a sixpence, and constituted by three or four concentric rings, of different shades of red. On these rings the vesicles are situated; a solitary vesicle occupies the centre. Willan states that the back of the hand is the most common seat of Herpes iris, that it is not connected with any perceptible constitutional disorder, that it disappears spontaneously, and that it is limited to young persons.

One of the most common, and in childhood the most frequent form of herpes, is Herpes circinnatus, but as it is so often associated with, and has such an intimate relation to Tinea tonsurans, I shall reserve a description of it till my next Lecture.

ORIGINAL COMMUNICATIONS.

FURTHER REMARKS ON AMYLENE.

INSTANCE OF DEATH FROM THAT AGENT.

By JOHN SNOW, M.D.

(Concluded from page 359.)

THE most exact way of administering any narcotic vapour is that which I have been in the habit of pursuing in experiments on animals, namely, to place them in an air-tight vessel so large, relatively to their size, as to represent a considerable apartment, and to introduce a known quantity of the narcotic agent in such a manner that the vapour should become uniformly diffused through the air. This method is evidently inapplicable to the human subject, but I tried a plan in a few cases in 1849, which very nearly approaches to it in point of accuracy; this was, to put a measured quantity of a volatile liquid into a balloon of known size, to fill it up with air by means of the bellows, and let the patient breathe from it. With so much chloroform as produced four per cent. of vapour, in proportion to the air, the effects were extremely uniform, the patients becoming insensible in three or four minutes, according to the greater or less freedom of respiration, and the vapour being easily breathed, owing to its being so equally mixed with the air. I did not try, however, to introduce this plan into general use, as the balloon would sometimes have been in the way of the Surgeon, and filling it with the bellows would have occasioned a little trouble. It seemed necessary to sacrifice a little of absolute perfection to convenience, and I therefore continued the plan which I had already followed.

The great point to be observed in causing insensibility by any narcotic vapour, is to present to the patient such a mixture of vapour and air as will produce its effects gradually, and enable one to stop at the right moment. Insensibility is not caused so much by giving a dose as by performing a process. Nature supplies but one mixture of diluted oxygen, from which each creature draws as much as it requires, and so, in causing insensibility by inhalation, if a proper mixture of air and vapour is supplied, each patient will gradually inhale the requisite quantity of the latter to cause insensibility, according

to his size and strength. It is indeed desirable to vary the proportions of vapour and air, but rather according to the purpose one has in view, whether medicinal, obstetric, or surgical, than on account of the age or strength of the patient; for the respiratory process bears such a relation to the latter circumstances, as to cause each patient to draw his own proper dose from a similar atmosphere in a suitable time.

When sulphuric ether was first introduced, it was often very slow in producing the desired effect, and not infrequently failed altogether, owing to the great cold produced by its own evaporation. The sponge, or whatever contained the ether, was often reduced much below the freezing point, and the patient went on breathing air of an arctic temperature with very little vapour in it. By using a metal inhaler, and placing it in a good quantity of cold water, which replaced the caloric carried off by the vapour, I was enabled to cause insensibility in four or five minutes, in every patient who was able and willing to breathe the vapour of the strength which was supplied. When the use of chloroform was introduced by Dr. Simpson, I retained a small water-bath with the inhaler I employed, as a regulating power, and quite as much to prevent the vapour from being in excess as to ensure its sufficient quantity.

In the use of amylene some kind of inhaler is required to prevent a great loss of the article, and to insure its producing its effects. I have applied amylene on a hollow sponge several times, to keep up the effect, after insensibility had been produced by means of an inhaler, and in short operations, such as most of those on the eye, it has answered perfectly, but in the longer operations, not always so well. In applying amylene in this way the moisture of the breath is condensed on the sponge, and congealed, so as to produce the appearance of hoar-frost, and at the temperature of freezing water, the air does not take up enough of the vapour of amylene to cause insensibility. M. Tourdes, of Strasbourg, has, indeed, succeeded perfectly in making children insensible with amylene by means of a sponge placed in a hollow cone of waxed cloth, with a small aperture at the extremity. The waxed cloth, no doubt, causes the warm breath to counteract, in some measure, the cooling effect of the evaporation. In an operation on the adult, however, in which M. Rigaud, of Strasbourg, applied amylene in this manner, he used 100 grammes (between four and five fluid ounces) in causing insensibility.

In administering amylene, I have employed the same kind of inhaler which I have used for many years in the exhibition of chloroform. I have lately had one made a little deeper, to adapt it better to the larger quantity of the agent used, and to make the water-bath a little more capacious. It is figured in the adjoining wood-cut. The inhaler itself is on a scale of half the dimensions, but the artist has drawn the face-pieces on a smaller scale. The temperature of the water-bath varies according to that of one's dwelling-rooms, at different times of the year, but I am in the habit of diminishing the depth of the coils of bibulous paper in the inhaler in warm weather. The quantity of vapour can also be diminished to any extent by turning the expiratory valve of the face-piece more or less to one side.

From experiments I have made with the inhaler, by passing a measured quantity of air through it, in the way in which it passes through during inhalation, and weighing it before and afterwards, I find that when the water-bath is at 56° Fahr. the air takes up 16 per cent. of the vapour of amylene, and at 62° nearly 19 per cent. For instance, 625 cubic inches of air carried off 76 grains of amylene at the former temperature, and 90 grains at the latter.

In speaking of the bisulphuret of carbon in 1848, (a) I said, "On account of the great volatility and very sparing solubility of this substance, the point of relative saturation of the blood by it is soon reached;" and further I said, "Indeed, I feel convinced that if a person were to draw a single deep inspiration of air, saturated with it at a summer temperature, instant death would be the result." Last autumn, when I commence my experiments on amylene, and ascertained its extremely sparing solubility, only one part to upwards of ten thousand of water, I was apprehensive that the above remark would apply to this agent; but on finding afterwards that the blood required to absorb about one-fifth as much of amylene as would saturate it, before a deep state of insensibility was

induced, instead of only one part in thirty-one, as in the case of sulphuret of carbon, the question was very much altered, and I came to the conclusion that it might be inhaled with at least comparative safety. I soon became aware, however, that it was capable of acting directly on the heart, if given too strong, or not well regulated. In one of the early experiments which I made to ascertain the effects of this substance, I placed a guinea pig in a jar holding 428 cubic inches with 25 grains of it. In two minutes and a half the animal was quite insensible. Soon afterwards the breathing became slower, and it ceased at the end of three minutes and a half from the beginning of the experiment. I immediately took the animal out, and in ten or fifteen seconds it gave a gasp, and in a few seconds more the breathing became quick and natural. There was, however, no action of the heart to be heard with the stethoscope, and, although the breathing continued for three minutes, the action of the heart did not return. The chest was opened immediately after the breathing ceased. The auricles were acting briskly, but the ventricles

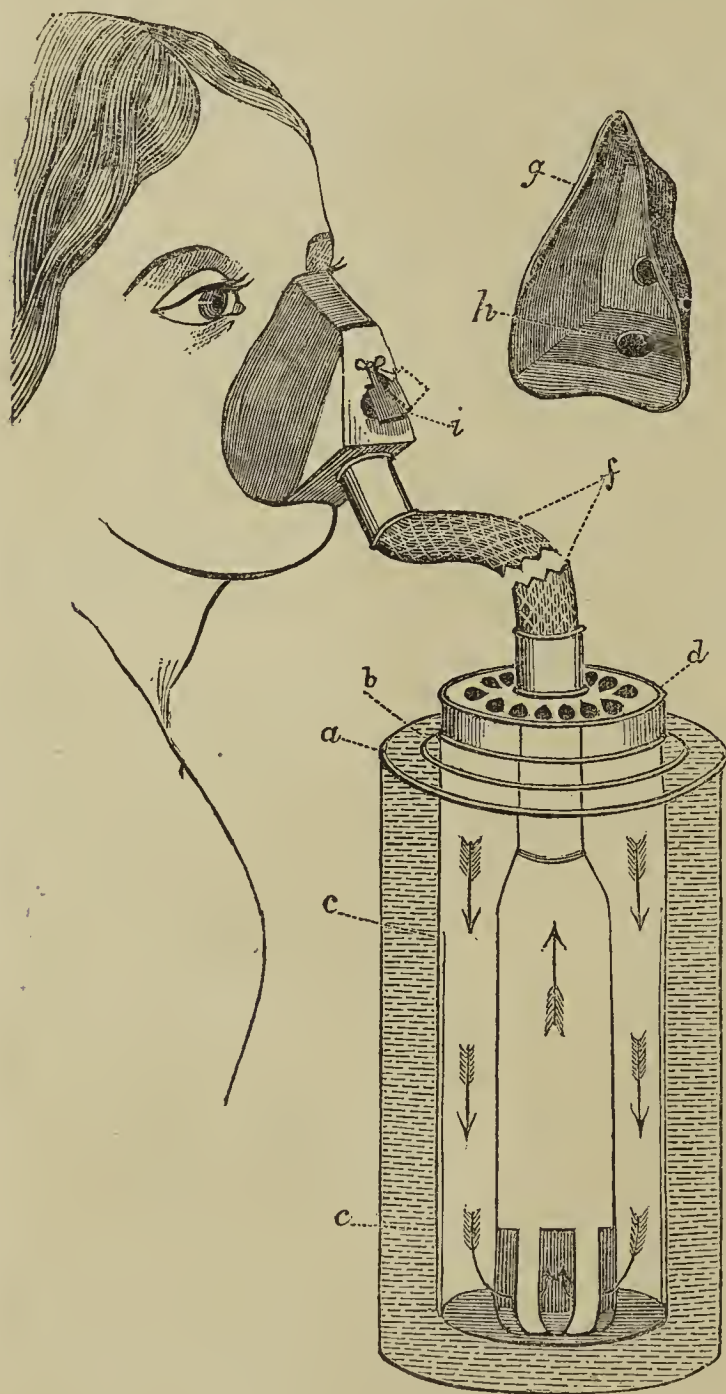
were not contracting. The right one was much distended with blood.

I concluded that the vapour was not properly mixed with the air in the above experiment, and that there had been an undue proportion of it at the bottom of the jar. I soon found that this must have been the case, for on introducing the amylene through an aperture contrived in the cover of the jar, and allowing it to evaporate gradually from a sheet of blotting paper suspended within, I found that twenty-five grains only produced a state of inebriation with staggering, however long the animal might breathe it, and that it was necessary to increase the quantity to forty-eight grains in order to induce a moderate state of insensibility. With the above quantity the air in the jar contains fifteen per cent. of vapour. I found in several other experiments that the amount of vapour may be increased to twenty-five per cent., and that guinea pigs may breathe it for four minutes without danger. It was only by increasing the amount of vapour up to nearly forty per cent. that I was able to arrest the action of the heart of a guinea pig by the direct effect of the amylene in such a way that the gasping respirations which followed did not restore its action. With a kitten six weeks old I did not succeed, even with vapour of this strength, for when the action of the heart seemed to have ceased, or to be on the point of ceasing, the respirations of the animal, when it was withdrawn from the vapour, always restored it.

Three cats, indeed, died with a less amount of vapour, but they died slowly. One of them was placed in a jar holding 3,000 cubic inches, and a fluid drachm of amylene was introduced on blotting paper every two minutes. The cat became gradually insensible after the sixth drachm had evaporated, and the breathing ceased as the eleventh drachm was evaporating, upwards of twenty minutes after the commencement of the experiment, and when the amount of vapour had reached between seventeen and eighteen per cent. The animal was immediately taken out and the stethoscope applied to the chest. The heart continued to beat for three minutes, quickly at first, more slowly afterwards, and it gradually ceased without any further respiration. I caused a cat to breathe air from a large bladder containing 20 per cent. of the vapour of amylene, while the stethoscope was applied. The breathing became embarrassed, and the action of the heart rapid, but I did not succeed in stopping the latter. When mice are exposed for half a minute to air containing eight or ten per cent. of vapour of chloroform, and taken out as the breathing gets embarrassed, I have always found them get worse and die; but if they are placed for half a minute in air containing 25 per cent. of vapour of amylene, and taken out under the same circumstances, they recover.

Under all these circumstances I concluded that amylene might be employed with a great prospect of safety, if care and caution were used; for it is only by the sudden action of a narcotic vapour on the heart that a patient would be allowed to die in the presence of a medical man.

In speaking of amylene in my paper published in January, (b) I said, "While I cannot venture to predict for it the absolute safety which seems to attend sulphuric ether under all circumstances, I confidently trust that it will be perfectly safe with careful management;" and, further, "It is my opinion that the cold produced during its evaporation would, in all the ordinary methods of inhalation, prevent the air taking up a quantity of vapour which would be dangerous." Mr. Clarke, of Bristol, in a paper published in the *British Medical Journal* (March 28), says of amylene, "It seemed impossible to get too much into the system, and with this I have been greatly impressed; it is this fact that appears to me to promise an immunity from danger. . . . It requires to be given almost unintermittingly, and requires the same amount of attention to keep up its effects as chloroform does to keep the patient safe. The direction of the attention, however, is one less calculated to give anxiety." Dr. Debout stated, as the result of some experiments on animals, in which he was assisted by M. Duroy, that if it sufficed to double the quantity of chloroform in order to transform the anæsthetic dose of that agent into a poisonous dose, it was necessary to quadruple that of ether, and to quintuple that of amylene, in order to arrive at the same result, and that, therefore, the innocuousness of the new agent was still greater than that of sulphuric ether (c). In a paper which Professor Tourdes, of



a. Outer case for water bath. b. Cylindrical vessel into which the amylene is put; it is lined with a coil of bibulous paper up to the point c. c. Cylindrical frame which screws into b; it has apertures at the top for the admission of air, and its lower two-thirds are covered with two coils of bibulous paper, which touch the bottom of the vessel b, except where the notches are cut in them. f. Elastic tube. g. Face-piece. h. Inspiratory valve. i. Expiratory valve: the dotted lines indicate the position of the valve when turned aside for the admission of air not charged with vapour.

(b) Medical Times and Gazette, p. 84.

(c) Bulletin Général de Théraputique, 15 Mars, p. 223.

Strasbourg, read before the Academy of Medicine of Paris, he came to the conclusion, from a series of experiments and observations, that "amylene was evidently much less dangerous than chloroform, perhaps even than ether." (d) In a subsequent paper, M. Tourdes says that the innocuousness of amylene is indicated theoretically by the insolubility and volatility of that substance; but this is a mistake; the insolubility and volatility which are a cause of the prompt recovery of the patient, as I have explained, are also a cause of its quicker action, and demand greater care in its administration; so that whatever safety amylene possesses is not a consequence of these properties, but rather exists notwithstanding they are present.

These sanguine expectations of the French investigators, and my own more moderate hopes, have been greatly disappointed by an accident which has happened in my own hands, since the last part of my paper was in print. Mr. Fergusson requested me to assist him on the 7th instant, in the case of a gentleman on whom he was about to operate for fistula in ano. The patient was 33 years of age and was in good health, with the exception of the local complaint, although he had lived somewhat freely. Mr. Fergusson examined the patient's chest the day before the operation, and found the sounds of the heart to be normal. I felt his pulse just before he began to inhale. It was natural, but somewhat accelerated, as usually happens just before an operation. He was lying on his side in bed. About six fluid drachms of amylene were put into the inhaler, (I never intentionally use all I put in, but add more before the paper becomes dry,) and he breathed steadily and gently. The valve was gradually advanced over the opening in the face-piece till it about three-quarters covered it, and the patient appeared to become quietly unconscious in about two minutes. He breathed quickly for a few inspirations just as he appeared to become unconscious. Just after this Mr. Fergusson came and felt the patient's pulse, and he says it was very good. I felt it also. I looked at my watch at this time, and it was two minutes and a-half or two and three-quarters from the beginning of the inhalation. Mr. Fergusson commenced to use the probe, and, finding the patient did not flinch, he began to use the bistoury. Mr. P. C. Price assisted at the operation. I held the patient's thigh with one hand, as I often do in such an operation, lest he should flinch. He did not flinch, however, but kept his limbs tense, without moving them. Just at this moment I observed that the valve of the face-piece, which I had left three-quarters covering the opening, had moved so as to cover it entirely, but I cannot say whether or not the patient had taken an inspiration a little stronger than I intended, and thought nothing of the matter, as I have frequently had to close the valve completely in giving amylene. It could not, however, have been many seconds in that position, for I paid no attention to the operation, except so much as was requisite to guide me in what I was doing. The inhalation was discontinued at the moment I have mentioned, and on looking round directly after I found that the operation, which had apparently been but one incision, was finished. I now began to feel for the pulse, more out of constant habit, and from a scientific curiosity, than from any supposed necessity of doing so. Although it had been good only half a minute before, I could not find it in the left wrist, and only a slight flutter in the right one. His breathing was, however, good, indeed quite natural, and he did not seem even to be very insensible, for there was some motion both of his features and limbs as if he were about to awake. I watched the patient with great anxiety, thinking that surely his good and natural breathing would restore the pulse, and feeling that at all events this superseded any other measures at the moment. In two or three minutes, however, he seemed to be getting more insensible; he did not wink on the edge of the eyelids being touched, and the breathing was getting slower and deeper. I called Mr. Fergusson's attention to the patient, and both he, who was preparing to go away, and Mr. Price, who had all the time been standing by the patient, were surprised to find that anything could be wrong, as they had seen the patient going on apparently so well, not only during the inhalation, but after it was discontinued. They dashed cold water in his face, which did not seem to have any effect. His countenance was now livid, and his breathing of a gasping character. It soon began to leave off, with the exception of deep, distant, gasping inspirations, and

we therefore began to perform artificial respiration, by Dr. Marshall Hall's method, placing him in the prone position, and bringing him partly round, while Mr. Price kept the mouth open. The air could be distinctly heard passing through the larynx during this motion. We also tried pressing on the chest with the head on one side and the mouth open, which answered very well as regarded the ingress and egress of air. Inflation from mouth to mouth was tried, but did not seem to answer so well. Although deep gasping inspirations were made by the patient till fully ten minutes had elapsed from the failure of the pulse, the measures used had no effect; I believe that I heard a feeble motion of the heart even after this period; and, as Mr. Fergusson perceived a slight pulsation at the same time in the right wrist, I was probably not mistaken. There were no further signs of life after this, although the artificial respiration was continued for a long time. I am quite sure as to the length of time respiration continued after the failure of the heart's action. The pulse ceased to be distinctly perceptible at ten minutes before five, and the patient was still breathing at five o'clock. He had not taken food for some hours, but drank a pint bottle of ale a little while before the operation. A good portion of amylene remained in the inhaler after it had been uncovered for an hour and a half.

There was an examination of the body forty-eight hours after death. The body was rigid. There was a good amount of fat beneath the integuments. The cartilages of the ribs were ossified. The lungs were large, and did not collapse; they completely filled the cavity of the chest, and seemed by their texture to be emphysematous, although there were no large cells on the surface. There was a little congestion at the posterior surface of the left one, otherwise they were not very vascular. There was a little clear fluid in the pericardium. There was a good deal of fat on the surface of the heart, which was somewhat larger than natural. It was removed by cutting the great vessels before it was opened, and in removing it three or four ounces of dark-coloured fluid blood escaped. The right ventricle was somewhat dilated, otherwise the heart was healthy; the walls of the left ventricle seemed very thick, but it was contracted, so as almost to obliterate the cavity. The liver was vascular, dark coloured, and friable. The stomach was healthy, and contained only a little mucus. The other organs were not examined. There was no odour of amylene in the body.

Although I used every care and attention in this case which seemed to be possible, I cannot attribute the patient's death to any other cause than the amylene. The failure of the pulse took place at the moment when the operation was performed; but, as the patient was unconscious, I can hardly connect the two events (e), or I might illustrate the case by one which I witnessed two or three years ago. In that case the Surgeon performed an operation for fistula, before the patient was unconscious, in mistake, and immediately afterwards the patient, a youngish man, went through the process of apparently dying; but, fortunately, gave a gasp and recovered. He then told us what I very well knew, that he had felt the pain of the operation. He said that he did not complain, as he expected to feel it; for he could not believe what had been told him about chloroform.

I believe the patient had emphysema of the lungs. There was no such force used in the artificial respiration as could permanently dilate the air-cells, and the dilatation of the right ventricle indicates some chronic obstruction to the pulmonary circulation. In commenting on a case of death from chloroform, which occurred at the Mauritius, I made the following remarks (f):—"The reporter considered that the emphysema was the cause of death, by interfering with expiration, and thus detaining the vapour; and it must be admitted that, if the vapour were not sufficiently diluted with air, the emphysema would increase the danger. At the same time I have had practical experience to show, that when it is sufficiently diluted, it may be safely inhaled, even in extreme cases of emphysema."

The continuance of respiration so long after the heart is paralysed, in the case I have related above, and in some deaths which have happened from chloroform, is an extremely curious event. It proves that some little circulation must be still going on through the brain, and, in fact, the slight fluttering pulse and feeble sounds of the heart once or twice heard indicate this; but, under these circumstances, why does not the

(e) There are, however, some authorities who would still do so.

(f) London Journal of Medicine, May, 1832.

heart itself recover? If the circulation were going on in the coronary arteries, it might be expected that the blood from the lungs, which has been aerated by respiration and freed from the narcotic vapour, would restore the action of the heart. Dr. Cockle has expressed the opinion, which is very probable, that the blood enters the coronary arteries in a retrograde manner, during the diastole of the ventricles, when the aorta and such great arteries are contracting on their contents; if so, with a very feeble circulation, the elasticity of the aorta, perhaps, cannot sufficiently act to cause a backward current, and perhaps, also, the over-narcotism of the heart is itself an obstacle to the coronary circulation, by the congestion in the capillary system which always attends on narcotism.

The above accident happened in the 144th case in which I have administered amylene. It is impossible to form an average from a single case. I do not know any reason why an accident like the above might not have occurred in one of the early cases in which I was giving chloroform, or, on the other hand, why I might not have been able to go on for four or five years at a time administering amylene, without any approach to an accident. The investigation of this agent has been actively taken up on the Continent, and the extent to which it will ultimately be used will probably not be much influenced by the occurrence I have had to relate.

18, Sackville-street, April, 1857.

A CASE OF CHYLOUS URINE, WITH POST-MORTEM APPEARANCES.

By W. O. PRIESTLEY, M.D.

Accoucheur to St. George's and St. James's Dispensary.

In the autumn of 1855, a boy, aged 11 years, was placed under the care of Professor Simpson, of Edinburgh, suffering, according to the account of his friends, from great pain in passing water, accompanied by serious deterioration of the general health. As Dr. Simpson's assistant at the time, I had the chief charge of the young patient, Dr. Simpson seeing him from time to time, as his many engagements permitted, or, when any plan of treatment being followed by no beneficial results, it seemed more especially desirable to have recourse to other suggestions and remedies.

From notes taken during his illness, it appears that the boy was born at the Cape of Good Hope. In early childhood he was taken to the Isle of France, and during his stay there, which extended over several years, he had frequent attacks of hæmaturia and chylous urine. He suffered also from this affection while in Ceylon, to which island he was removed some time before coming to England. The attacks thus noticed were intermittent, coming on at intervals of weeks or months, the urine being apparently natural in the mean time. During the continuance of the attacks the urine had always more or less of a milky character, though this condition was most marked after taking food. The several attacks usually commenced with pain in the back, and bloody urine; by the second or third day the urine was distinctly milky. The occurrence of these symptoms did not at the time produce much inconvenience beyond the alarm occasioned by the unusual appearance of the urine; he expressed himself as feeling weak, but his general health, it seems, did not suffer materially, as in 1854, when it was proposed he should proceed to Great Britain for his education, his friends saw no valid reason for the postponement of his voyage, although he was at the time suffering from one of his customary attacks. During the passage home his complaint disappeared, he became much stronger, and early in 1855, when placed at school near Edinburgh, he seemed in the enjoyment of comparatively good health and spirits. One day, however, during the summer of the same year, after play-hour, he became faint and languid, complained of pain in his back, and feeling an inclination to empty his bladder, passed a large quantity of blood. The next day the urine was distinctly milky, as he had observed it in his previous attacks, and so continued, never again becoming clear, until within a few days of his death.

At this time such remedies as seemed appropriate were prescribed by Dr. Kirk, an intelligent country practitioner, who was asked to see him; but no permanent benefit followed,

though, as Dr. Kirk informed me, he appeared to have been relieved by small doses of turpentine then administered.

When he was brought to Edinburgh in the August following, he was considerably emaciated, and had a decided anæmic appearance. He was intelligent, and gave a remarkably succinct account of his symptoms. He had, indeed, a sedate expression of countenance far beyond his years, and his forehead was wrinkled, and his eyebrows were contracted in such a way as to give a prematurely old expression to his face, and rendered probable the existence of some chronic and exhausting disease. The skin was everywhere deficient in moisture, and was dry and parched to the touch; the pulse was feeble, about seventy pulsations in a minute. The appetite was moderate, and he had a singular craving for dishes in which vinegar or hot condiments were predominant. The tongue was clean and pale; the thirst was considerable, but not urgent, and the bowels were constipated. Micturition, he complained, had latterly become very painful and difficult, and the milky character of the urine continued much as it had done from the commencement of the present attack. The quantity passed at this time was about thirty-five or forty ounces in the twenty-four hours. Ordinarily it was of a pinkish-white colour, as if earmine had been mixed with milk, and had a considerable sediment, chiefly of blood, mixed with jelly-like masses resembling decolorised clot. The surface of these jelly-like masses frequently assumed a botryoidal form, and once or twice gave rise to the impression that they might consist of some form of hydatid. On closer examination, however, no structure was discernible, and it became evident that they were simply composed of fibrin which had assumed this rounded form. They were very easily broken down, and never retained the solid form for more than a few hours after micturition.

The passing of coagula formed in the bladder was a source of great distress and pain to the unhappy patient, and caused him to dread the periods when it should be necessary to empty his bladder. At these times coagula were driven into the urethra, and often acted as complete plugs, preventing the egress of the urine. When any portion protruded, he had learnt to seize it with a piece of paper to prevent its slipping, and thus drawing it out succeeded in clearing the urethra. Besides this inconvenience he asserted he had no other pain whatever.

A minute examination of the urine, a few hours after it was passed, showed its specific gravity to be 1022; its reaction decidedly alkaline. On being allowed to stand, it speedily separated into two portions—a sediment equal to a fourth of the whole, which was composed chiefly of free blood discs, with occasional triple phosphate crystals, and masses of fibrin in which other blood corpuscles were entangled. In the supernatant chylous fluid minute amorphous molecules could be detected by the microscope, and among these a few scattered epithelial nuclei, with innumerable linear vibrios moving in every direction across the microscopic field. The vibrios were present both in the sediment and supernatant fluid. No casts of tubuli were seen at any one of the examinations. The amorphous molecules just mentioned were readily washed out of the urine by shaking with ether, and, no doubt, consisted of minutely divided fat particles, too small to be recognised as such by the microscope, but by their diffusion giving rise to the milky appearance possessed by the fluid. If not interfered with, they rose to the top of the fluid as a creamy layer.

The clear fluid, after the separation of the fat by the ether washing, threw down copious flakes of albumen on the application of heat, or on the addition of nitric acid. Urea was found, but no sugar could be detected by the usual tests.

The account of the urine thus detailed, with some slight differences, continued substantially the same during the persistence of its chylous condition. The quantity of chylous urine passed was always greater two or three hours after taking food than at other times, while its density somewhat diminished, being sometimes 1014 or 15. The creamy layer rising to the top of the urine passed under these circumstances was likewise thicker, but there were no periods of the day, not even the early morning before taking food, when the urine was free from opacity, as in other recorded cases.

On two or three occasions I had an opportunity of observing the urine, shortly after being evacuated, assume entirely the solid form; it had then much the appearance of blanc-mange, being a white opaque jelly. After a short time the

mass broke up, and separated into the two portions above described. The coagulation *en masse* occurred occasionally only, and usually soon after the patient had risen in a morning; by far most frequently this intermediate stage of coagulation was wanting.

The occurrence of vibrios in such numbers so soon after evacuation excited my curiosity, and later I found them in almost equal quantities immediately after my friend Mr. Edwards had drawn off the urine with a catheter.

The treatment recommended by Dr. Simpson consisted chiefly of a liberal diet, avoiding at first as much as possible any articles containing or readily converted into fat; to these were added mineral acids and vegetable tonics. Gallic acid was also given at various times, after the plan recommended by Dr. Bence Jones, but the nausea it produced on each occasion rendered a protracted trial of this remedy inexpedient. Professor Christison, who was asked to see the young patient in consultation, recommended a trial of the tincture of muriate of iron, which was given in ten and fifteen drop doses. Later, when feebleness became more apparent and emaciation greater, cocoa oleine and cod-liver oil were given to him. No treatment, however, had any marked effect on the symptoms, and the feebleness evidently increased. In October he was confined to the house, and at the end of the following month to his bed. At this time the quantity of chylous urine passed was as much as fifty to fifty-five ounces daily.

Early in December his feet became œdematous for the first time. Towards the end of this month the quantity of urine diminished, and at the same time lost its milky appearance, becoming as clear as healthy urine, with a sp. gr. of 1020. No favourable change in the boy's condition was observed, however, to be consonant with this modification of symptoms, and he sank a fortnight later, apparently from asthenia.

At the *post-mortem* examination the body generally was pale and considerably emaciated. The abdomen being laid open the intestines were comparatively bloodless, and indeed every tissue appeared to be in an anæmic condition. Except this no other morbid change was noticed, either in stomach or intestines. The liver was large, friable, and to the naked eye far advanced in fatty degeneration. The spleen was small, but otherwise natural. The kidneys were pale, both a little larger than natural, but to the naked eye presented no great deviation in structure from the normal state; with the ureters and bladder attached they were removed for subsequent more minute examination.

The heart was small and flabby, little blood being found in each cavity. After being cleansed with water the interior was seen to be everywhere covered over with whitish spots, something like an atheromatous artery, and these spots were evidently produced by some deposit raising up the endocardium, and seen through it. The same speckled appearance was continued into the aorta, but did not extend far beyond the valves. The upper part of the right lung was adherent to the pleura, and studded with miliary tubercles, in some parts in a softened condition. The left lung was healthy. The head was not examined.

At a more particular examination of the removed kidneys it was noted, that in both the polygonal network of vessels, present on the surface of the organ when in a healthy condition, was in a measure obliterated, being visible only in isolated patches with wide intervals. The renal texture was soft without elasticity, and the fibrous capsule could not be stripped off without carrying away portions of the friable cortical substance. When sliced the section was pale, few injected vessels being observable. The line of separation between the cortical and tubular portions was for the most part indistinct, although in limited portions the division was sufficiently marked. Thin slices from these limited portions, when submitted to the microscope, were found in some degree affected by fatty degeneration, but in a less advanced condition of disease than the rest of the kidney proved to be. Thus the tubuli were distinct, and although many of the epithelial particles were filled with fat granules, the greater number were sound and appeared as in health. The basement membrane of the tubes and the Malpighian bodies had undergone no morbid change.

In the greater portion of the substance of both kidneys, however, fatty degeneration had proceeded to a much greater extent; the usual tubular structure of the cortex, indeed, could scarcely be recognised, the whole texture apparently consisting of broken-up epithelial particles, mixed with fat granules and larger oil globules. Few capillary vessels could

be found, and when a Malpighian body was with difficulty made out in these situations, it was atrophied and granular. The tubuli of the pyramids in these situations had undergone a like fatty transformation. Every gradation of disease could be made out around the circumference of those portions which approached nearest to a healthy condition. Thus tubules might be seen filled with fat granules, or fat granules enclosed in irregular epithelial cells, the basement membrane itself having frequently undergone fatty transformation.

Nothing abnormal was observed in the pelvis or ureters, and the bladder was perfectly healthy and natural in appearance.

The hepatic cells, from a portion of the removed liver, were in a far advanced state of fatty degeneration. The scattered spots over the interior of the heart proved to be atheromatous in nature, being composed of aggregated small masses of bright refracting granules, soluble in ether. The muscular structure of the heart had also undergone fatty change, the transverse muscular striæ being rendered indistinct, and in many cases entirely replaced by fat granules.

Remarks.—The viscera removed from this patient were laid before a meeting of the Edinburgh Medico-Chirurgical Society in Feb. 1856, and I promised at that time to report the case more fully at my leisure. The case is of unusual interest, as I believe hitherto no *post-mortem* appearances have been recorded after so-called chylous urine.

Instances of the disease in question are comparatively rare in this country, and in hot climates, where the affection is more common, the number of deaths occasioned by it seems to bear a small proportion to the number of individuals attacked. The contributions of M. Rayer, and Drs. Prout and Bence Jones, on this subject, contain evidence that patients suffering from the affection have lived for many years without serious deterioration of the general health, and that death, as an immediate consequence of the disorder, is not frequent. M. Rayer informs us, however, in his "*Maladies des Reins*," that death sometimes occurs in the severe cases, and he regrets that the morbid anatomy of such instances has not been more carefully investigated. Dr. Prout had one opportunity of examining the body of a patient who sank after suffering from this affection, and he reports that in the kidneys there were no morbid appearances appreciable by the senses. Dr. Bence Jones had likewise an opportunity of examining the body of a patient who died from heart disease, but who had passed fat with the urine at different periods during life. In this case no morbid change was observed in the kidneys.

From these data it has been argued that in cases of chylous albuminous urine the fault occurs primarily in the assimilation of aliments, as in diabetes, while the kidney is only functionally disordered. It is also supposed that this view is strengthened by the modification which the urine undergoes, corresponding with the quality and times of taking food.

The special point of interest, therefore, in the case I have described is, that, whereas no morbid appearances were found in Dr. Prout's and Dr. Bence Jones's patients, here, both kidneys had undergone a somewhat general transformation into fat, which, as it did not produce any marked contrasts of structure with healthy renal texture, was not readily observable by the naked eye, but was at once detected with the microscope. The question obviously arises, was this case one of pure chylous urine, or was it complicated with Bright's disease? I suspect no very satisfactory reply can be given, in the present state of our knowledge on this subject; but I may recur to the fact, that in the case detailed neither early anasarca nor later coma supervened, nor, indeed, any symptom which would have led to the inference that other disease existed than the apparent one. The symptoms exhibited in the case were, perhaps, unusually severe for this country, there being, during the last attack, no remissions of the chylous condition of the urine, as observed in other cases; and the large quantity of blood globules constantly present in the urine evidencing great derangement in the vascular system of the kidney, such, indeed, as might be expected to accompany some stage of a disorganizing process. The close connexion observed between chylous urine and hæmaturia in countries where both are endemic, combined with what we know of the transformation of the materials of the blood into fatty granular matters while in contact with the tissues, may tend in these later days to suggest the probability of the disease in

question being rather of the nature of a true hæmorrhage of the kidney than a disease dependent on faulty assimilation. The modifications of the urine after taking food might be accounted for, to some extent, by the changes effected in the quality of the blood, as well as by the increased force of the circulation.

16, Somerset-street, Portman-square.

NOTES ON CASES IN PRIVATE OBSTETRIC PRACTICE.

By DOVER STATTER, Esq.

Case 1.—My father was called upon to attend Mrs. T., in her sixth confinement, on the 24th of November last. She is very stout and of short stature. The waters broke soon after his arrival, but the labour was lingering and tedious, until the evening, when the os uteri was fully dilated, but the head of the child was above the brim of the pelvis. He administered half an ounce of ergot in infusion with Battley's solution; and in eight hours, this producing no results, another half ounce was given without any effect; the head still continuing above the brim.

On the 25th, he sent for me, and we thought it advisable to let her have a little repose, and gave her an enema and 40 drops of Battley's solution. It produced no sleep, and as the pains still continued lingering, and attended with great prostration, we thought it desirable to have another opinion.

Dr. A. Stookes met us about 11 a.m., and in consultation, we deferred doing anything until 3 p.m., and that, if matters were no nearer then, to try if we could succeed with Simpson's long forceps.

At 3 p.m., the head was above the brim, and resting on the left iliac space, and jammed against it; the right side being more free. The great difficulty which presented itself, was to dislodge the head from the iliac space, and get the lower blade fixed firm, without getting it entangled with the soft structures, at that distance from the outlet of the pelvis. With a little care, I soon got the blade to rest hard against the head of the child, and keeping the pressure steadily against it, gave a lever-like motion to the blade, and it passed on. This was satisfactory to my father and Dr. Stookes, and then I introduced the top blade. It was more readily done than the first, and the instrument worked very well. I now imitated nature when the pains came on, and brought the head down in the axis of the pelvis, applying traction in different directions according to its position, and then the face of the child presented to the sacrum of the mother. After the head was born there was great difficulty in effecting delivery; the child was an unusually large one, and its body occupied all the pelvic cavity, so that there was great difficulty in getting the finger under the armpits of the child. Ultimately I succeeded; the child being still-born. The instruments had not injured the head of the child, and we tried to resuscitate it, but it did not avail. Had the ergot anything to do with its death prior to delivery? and yet it was administered at that time which was proper, namely, when the os uteri is fully dilated, as laid down by all the authorities in obstetric practice. Mrs. T. had no bad symptoms after, and is now in her usual health.

Case 2.—My father was called upon to attend Mrs. W. in her eighth confinement, on the 2nd January, 1857, and she was delivered of a female child. On the following day I saw her for him, he being unwell. Mother and child were doing well; and on inquiry if the infant's bowels had been acted upon, the nurse replied that they had not. I ordered a small teaspoonful of castor oil. On the 4th I learned that the infant's bowels had not been acted upon; ordered more castor oil, and this likewise had no effect. On the 5th ordered it three grains of calomel, and an injection of gruel and castor oil. 6th.—The bowels had not been acted upon, and the nurse said that the injection had stopped. I called again, and introduced a bougie in the anus about two inches, and it would go no further. I then requested another opinion. The parents objected to any operation, and so declined, saying that they would rather let their infant die than have it cut in any manner.

After this I did nothing but look on. The abdomen was greatly distended, and of a bluish aspect, and the veins became very prominent. The infant had not taken the breast since

its birth, and it now gradually became insensible, and died at seven a.m. on the 8th instant.

I obtained permission to make a post-mortem examination, which I did on the following day, my father going with me. We found the intestines greatly distended, and of an olive-green colour, and on detaching the peritoneal lining from the upper portion of the rectum we found it to terminate in a cul-de-sac. We then made an external incision, first introducing a director upon the short narrow mucous canal at the anus, and then cutting laterally out on each side. We found the canal in calibre to be about the size of No. 12 metallic bougie, and terminating in a cul-de-sac, meeting the cul-de-sac of the rectum, cellular tissue being interposed.

We took the parts out of the body, and it was with great difficulty we made a passage between with a director. From the foregoing it is evident that nothing short of using a canula and trocar, and piercing in the direction of the rectum, would have availed to give relief, and afterwards to have dilated the opening with bougies.

Case 3.—On May 23, 1856, I was consulted by Mrs. S. She stated that she had been married two months ago, and that she had a great swelling at her privates, and felt very sore. I called upon her the following day, and made an examination. The labiæ were greatly distended, and on separating them I found eight chancres. I prescribed Plummer's pill night and morning, with Dec. sarzæ co. lbss., Iodide of potassium ʒj.—a table-spoonful three times a-day, with a black wash externally, to be kept applied to the chancres.

I did not inform her or her friends about my suspicions, but desired to see the husband; and when he came he declared that nothing was the matter with him; nevertheless, there was no doubt but that he had contracted syphilis before marriage.

I continued my alterative treatment of Mrs. S., and she got better, and was sent into the country.

On her return on July 22, she had secondary symptoms, sore throat, and a copper-coloured eruption of the skin. She was pregnant, and in her fifth month. The alterative treatment was resumed, and caustic daily applied to the ulcerated throat. She soon got better of these symptoms, and continued well until October 19, when she was delivered of a seven months' male child. About a month afterwards her hair began to fall off, but nothing further is apparent. She is still taking the Dec sarzæ co. and iodide of potassium. Since the birth of the infant up to the present time it has not exhibited any symptoms of disease. No doubt the treatment of the mother during pregnancy acted also upon her offspring, and afterwards likewise by its taking its subsistence from the mother while she was still under alterative treatment.

Liverpool.

P.S.—In *Case No. 3* I stated that no symptoms of disease had as yet made its appearance in the infant. I have just seen the child, and it has had, since Sunday last, an eruption over its body. It thus makes its first appearance in three months after birth.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

MALIGNANT DISEASE OF THE FEMUR. AMPUTATION AT THE HIP-JOINT.

(Under the care of Mr. STANLEY.)

(Reported by Mr. EDGAR BARKER, House-surgeon.)

THE following are the details of the case to which we referred in our last week's report (see *Case No. 8*, in the Tabular Statement):—

M. G., aged 52, was admitted into Darker Ward on the 7th of March. He was an ill-nourished man, short in stature, of sallow complexion. He stated that about three years ago he fractured his right femur, for which he was admitted into St. Bartholomew's Hospital, under the care of Mr. Lawrence; the limb united with slight shortening, and he was discharged cured, although unable to bear much weight on the limb. About nine months ago he noticed a swelling near the seat of the old fracture, which has gradually increased up to the

present time. His health began to fail, and when he was admitted into the hospital the limb presented the following appearance:—

The upper third of the right femur was occupied by a large swelling of somewhat oval shape, which extended some distance upwards, in front and behind; he complained merely of its size, and not on account of any pain that it caused him.

A consultation was held; the disease was thought by all to be of a malignant nature; and as his health had somewhat improved by rest and nutritious diet, and as all the internal organs were believed to be sound, it was thought that amputation at the hip-joint was justifiable. Last Saturday week, the patient was removed to the operating theatre, and chloroform was administered by Dr. Martin. The disease had extended so near to the articulation, that Mr. Stanley was compelled to modify the method of cutting his flaps accordingly. The anterior incision was made with a small catlin, and coming about two inches below the anterior superior spine of the ilium was carried across the front of the thigh to the edge of the pubis. Hæmorrhage was controlled by pressure on the main vessels above the crural arch. The disease extending as it did very high up about the femur, great caution was necessary not to leave any attached to the soft parts. After disarticulating the head of the bone, the posterior flap was cut, and the limb removed. The femoral artery had been secured before the head of the bone was disarticulated, and altogether the patient did not lose much blood. The wound, which was of moderate size, was closed with sutures and broad strapping plaster. Just before the limb was removed, the patient became very faint, and remained so till the close of the operation, and from this time chloroform was discontinued, and strong spirits of ammonia applied to the nostrils. He was removed to bed, and very shortly rallied, and his pulse regained a moderate strength. Small quantities of brandy were from time to time administered at the direction of the house surgeon, who remained at the bedside. A motion was passed under him in the bed (apparently involuntarily). Nothing worthy of note occurred except that from time to time he suffered from slight paroxysmal cough, until the house-surgeon, observing his face suddenly blanch, and his pulse rapidly declining, opened the stump, and removing a handful of clot, discovered in the anterior flap, a vessel apparently as large as the radial, bleeding in a full stream; this was, without loss of time, secured, and the hæmorrhage completely arrested. From this time to that of his death he never thoroughly rallied, though stimulants were freely administered. He died two hours and a half after the operation.

Examination of the Limb.—On section, the growth presented the ordinary characters of a firm medullary cancer springing from the interior of the bone, from the old seat of fracture, and extending in both directions as far as the head of the bone, above, and four or five inches below the fracture. The cartilage was easily stripped off the head of the bone, showing its cancellous texture infiltrated with cancerous deposit. Under the microscope, the ordinary appearances of medullary cancer were recognised.

SENILE GANGRENE—REMOVAL OF THE AFFECTED FOOT—DEATH.

(Under the care of Mr. LLOYD.)

(Reported by Mr. DANIEL.)

J. Graham, a healthy-looking old man, of 73 years of age, was admitted into Pitcairne Ward on November 13, 1856, on account of a painful and irritable ulcer on the left leg. He stated that he had led a temperate life, and that his health had been always good. The ulcer above spoken of first made its appearance about two months ago; and about one month ago he began to suffer pain (which he describes as gnawing, and more severe at night than in the daytime) in the little toe of the same side. The beat of the femoral artery is very distinct, but below that vessel no pulsation can be distinguished; the heart sounds are perfectly natural; more of the arteries can be felt to be rigid.

Ordered to take for a short time a stomachic draught three times daily, and a 5-grain pill of soap and opium every night. Two pints of porter daily. Balsam Peru was applied to the ulcer, which, it may be remarked, healed rapidly. In a day or two the left little toe became slightly discoloured, and he was then put upon a mixture containing bark and ammonia.

December 1.—The toe is now quite black and shrivelled. At this part, however, the gangrene does not seem inclined to

extend, but the patient now is complaining of pain in the heel, and also in the neighbourhood of the inner malleolus.

January 29.—Since the last date the mortification has been steadily increasing around the malleolus; the compound gall ointment has been applied, and somewhat relieved the pain, and around the parts a strong solution of argent. nit. has been employed; internally, he has taken small doses of arsenic, but, in spite of every remedy, the whole foot to-day presents a livid aspect. He states that he is in more pain; he is very drowsy and heavy; his conversation is unconnected, and his memory much impaired; he, however, takes his nourishment very readily, and, indeed, with some relish. Now, besides his bark and ammonia, he is to have wine ʒviij. daily; to take 10 grains of the extract of conium, and not more than 2 grains of opium in the course of the day.

11th.—A line of demarcation at the ankle.

23rd.—Separation deeper and deeper daily. To-day he is a good deal depressed; has vomited two or three times. To leave off the ammonia, and now to take, three times a-day, a draught containing the nitro-muriatic acid with a small dose of hydrocyanic acid.

27th.—To-day the foot, being apparently sufficiently unconnected to be removed with but little use of the knife, Mr. Lloyd disarticulated the astragalus, and cut through the sloughing tendons, etc. There was a little bleeding, which was checked by the actual cautery, as the arteries could not be tied, on account of their giving way immediately the forceps were applied. The malleoli were not sawn off.

March 7.—He has been more comfortable since the removal of the foot; he is now, however, troubled with bedsores; there is slight discoloration about the heel of the other foot; he is taking brandy ʒx. daily.

14th.—Wanders more and more every day.

20th.—Much weaker; he can hardly keep anything on his stomach.

21st.—Died at eight o'clock this morning. No autopsy was permitted.

KING'S COLLEGE HOSPITAL.

EXCISION OF AN ENLARGED THIRD LOBE OF THE PROSTATE IN A LITHOTOMY OPERATION.

(Under the care of Mr. FERGUSSON.)

THE accidental removal of small portions of the prostate in cases of lithotomy in patients having enlargement of that gland has not unfrequently occurred. We are not aware, however, that an intentional excision of any part of it was ever practised prior to the one we now have to notice. About four years ago we witnessed, at St. Bartholomew's, a lithotomy, by Mr. Lawrence, in an old man in which the stone was large, and some delay in extracting it after it had been grasped by the forceps occurred. At length the parts yielded, and to the surprise of some lookers on, a mass of whitish structure fell out before the stone. This proved to be a portion of prostate tissue, and was about the size of half a walnut. It was clean and healthy looking, and did not present any ulceration, exhibiting the appearance of having been enucleated and not possessing any covering of mucous membrane. Mr. Lawrence stated that he did not think the man's prospect of recovery in any way diminished by the occurrence of it. A good recovery resulted. This is the only case in which the writer has ever himself witnessed the accidental removal of portions of the prostate of any size worth notice; but it will be in the memory of many members of the Pathological Society, that at one of its meetings about a year ago, Mr. Fergusson stated in the discussion that the occurrence had frequently happened to himself, and that he had never seen reason to attribute ill consequences to it. The practice of deliberately excising a portion of the gland must be viewed, however, from quite a different point, and as already said, we are not aware that any Surgeon has heretofore adopted it.

On Saturday last, a man, aged 65, moderately stout, and in fair health, was submitted to lithotomy in the theatre of King's College Hospital. Mr. Fergusson had more than usual difficulty in seizing the stones, on account of their lying in a deep hollow behind the prostate. He succeeded, however, in little more than the ordinary time, and two flattish calculi of moderate size were extracted. He then examined the wound carefully, and introducing a pair of straight narrow-bladed

lithotomy forceps grasped something of considerable size, and then asked for a long probe-pointed bistouri. The latter instrument was introduced deeply into the wound, as if for the purpose of enlarging the opening in the neck of the bladder, and then, much, we believe, to the wonderment of all present, turned with its edge towards the median line, and made to cut very freely across the under part of the first incision. This liberated the forceps, which were withdrawn grasping a mass the size of a pigeon's egg of firm whitish fleshy structure. This when taken from the forceps proved to be the third lobe of the prostate. It was conical in shape, and had a broad base, the latter presenting an oval cleanly cut surface of about an inch and half long and three-fourths of an inch across. On its apex was an elevated surface about as large as a four-penny-piece, which was ulcerated and granulating. Excepting at this spot the mucous membrane was sound and the structure healthy. No material hæmorrhage attended the operation, and after the man had been removed to his bed, Mr. Fergusson made the following remarks to those present:—

Mr. Fergusson's Remarks.

"The man upon whom, gentlemen, you have just seen me operate, was sent up from the country some weeks ago, having for long suffered from stone. I ascertained the existence of a calculus, and suspected that there were two, and finding also that he was the subject of a greatly enlarged prostate, and had suffered from difficult micturition on that account, I preferred submitting him to lithotomy instead of lithotripsy. You would observe that in sounding him with the staff, which has a long curve, I could not strike the stone, and that I was obliged to use an ordinary sound with a very short curve in order to do so. This confirmed my opinion that the stones lay in an unusually deep basin, behind an enlarged prostate. After the incisions had been completed the difficulty in sufficiently elevating the forceps, to make their blades dip into this hollow and seize the stones, was considerable. My finger in the wound came against a large third lobe of the prostate, and the easiest direction into the bladder was by one side of this, and not over its surface. The second of the calculi I extracted with the forceps in the sulcus, on one side of this projecting mass. Having completed the operation, as far as the calculi were concerned, I recollected how often in treating cases of enlarged prostate I had wished that it were practicable to remove the source of obstruction by operation; and it occurred to me that this was the very case in which to do it. Were the man to be left with his prostate in the condition in which I had ascertained it to be, there could be no doubt but that the operation would be but partially successful in relieving his urinary symptoms, however satisfactorily it might have accomplished its intended object. Believing, therefore, that the excision of the projecting portion promised more of advantage than it incurred of risk, I determined to practise it. The instruments used were a pair of ordinary straight lithotomy forceps, and a probe-pointed bistouri, such as is generally employed for enlarging the opening in the prostate when necessary. I grasped the prominent lobe firmly by the former, and holding it forwards, sliced it freely through beneath, taking care to keep the knife close under their blades. I am not aware that such a procedure was ever before adopted, and must leave it to experienced lithotomists, who alone are capable of estimating its merits and its risks, to say whether it was a warrantable one. That some additional risk has been incurred there can be no doubt, as a second wound, and one of considerable size, is left to heal. Still, on the whole, I am strongly of opinion that I have done what the circumstances of the case demanded, and have conferred a great benefit upon my patient. I would direct your attention to the circumstance that there is an ulcer on the most prominent part of the removed lobe, and would also remark, that the incision made in removing it does not appear to have joined that made in the lithotomy at the left side. There is, probably, a narrow bridge of mucous membrane between the edge of the lateral wound and that made by slicing off the growth. The growth is removed quite to the level of the mucous membrane of the urethra, and the passage into the bladder is now most free."

The patient, up to the present date (Thursday afternoon), is doing well, and there seems a fair probability of his recovery.

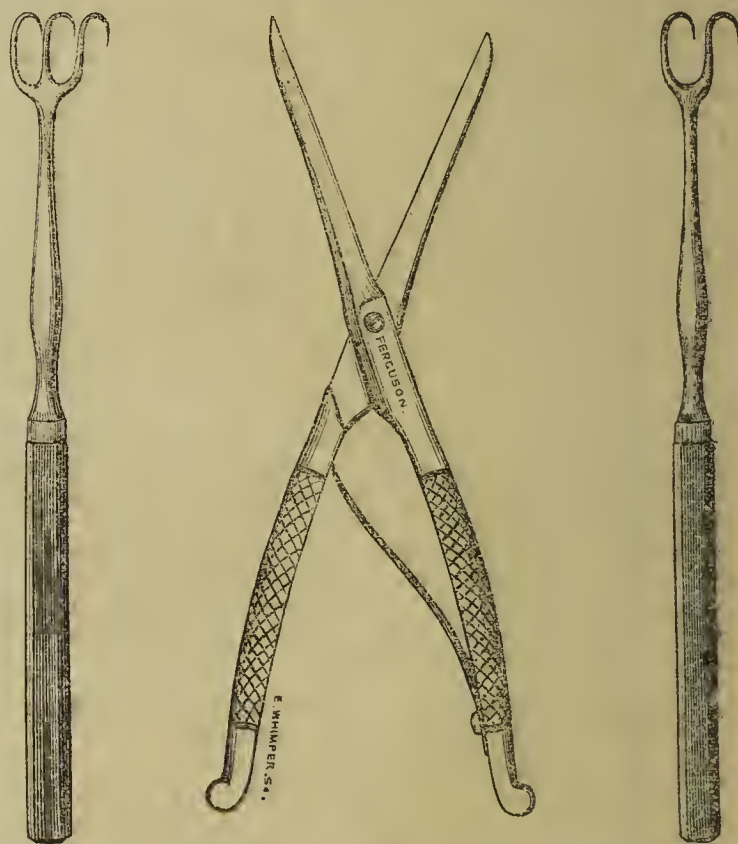
ST. MARK'S AND OTHER HOSPITALS.

CLINICAL COMMENTARIES ON DISEASES OF THE RECTUM.

(Continued from page 285.)

No. XI.—METHODS OF APPLYING THE LIGATURE TO INTERNAL PILES.

THE plan in general use of applying the ligature to piles is by means of a curved needle fixed in a handle, with which the pile is transfixed, and the threads having been drawn through and separated, the mass is tied in two halves. This is the plan recommended by Mr. Syme, Mr. Curling, and Mr. Ashton, in their respective works, and adopted, we believe, with but little modification, by most London surgeons, Mr. Salmon excepted. The plan pursued by the latter surgeon appears to us to have some important advantages over the other; and we shall, therefore, describe it in detail. Before doing so, it may be observed, that the objections offered to the old method are—1st. That it is sometimes difficult to get the ligature sufficiently deep on the base of the pile. 2nd. That the piles are often not isolated laterally, but join one with another, and thus prevent the ligature from getting between them. 3rd. That, by tying so thick a mass, and often also including portions of skin, much more pain is caused than is necessary. Mr. Salmon states that he often sees cases which have been treated by the ligature in its old method of application, in which the pile has been cut through its middle instead of being taken away completely. The instru-



ments used by him are those here shown—a pair of knife-bladed scissors and a toothed tenaculum. No needle is employed. Immediately prior to the operation an enema is given so as to wash out the gut above, and at the same time bring the hæmorrhoids down into view. The patient is then placed on his side on a high table, with the knees drawn up to the abdomen. An assistant elevating the buttock, the tenaculum is passed into the gut with its teeth looking outwards, and made to seize the pile which it is intended to tie. The latter is then drawn downwards, and held away from the margin of the sphincter while the operator with the scissors in his right hand makes a deep gash just at the margin of the junction of the skin and mucous membrane. The pile is yet further isolated by incisions with the scissors on each side, and is thus left with its mucous membrane only uncut. The incision separating it from the circumference of the gut is often, if the pile be large, an inch or an inch and a half deep, passing up parallel with the bowel. Lastly, a ligature of

strong waxed silk is applied in the tract of this deep wound, the part actually tied often consisting of little more than mucous and submucous tissue. All the piles present having been tied, rarely in more than four segments, and generally in not more than three, any redundant folds of skin external to the incisions or external piles which may be present are snipped away. The ligatures are cut off long, and the piles are not returned, but carefully kept protruded. The first dressing is a compress of cotton wool, or a piece of sponge, and a nurse having been allotted to each patient, is instructed to sit with the hand lightly pressed against the part, and to take care that bleeding does not occur. On the following morning a bread poultice is substituted for the wool, and continued until the tension of the parts has subsided. The piles are considered due on the tenth day, and generally for some days prior to this the patient has been allowed to be up, and upon the couch in the day-room. Throughout the strictest attention to cleanliness is enforced, and all discharges carefully washed away. From the observation of many cases there cannot, we think, be any doubt as to the very superior efficacy of this method of applying the ligature over others, and can conceive of but one objection which can be alleged against it; that is as to its risk of bleeding. Mr. Salmon holds that the pile is generally fed by a single large artery which runs usually just beneath the mucous membrane, and in a straight direction from above downwards. A very free incision from without, and passing up parallel with surface of the sphincter, may therefore be made without endangering this vessel. Then again, the not cutting away the ends of the ligatures, and not returning the piles, are great safeguards against its occurrence, and should it happen, much facilitate the measures for its arrest. To appeal to experience, we believe that the results which have been obtained through a long series of years at St. Mark's justify Mr. Salmon in holding the risk of hæmorrhage to be no objection whatever to the operation.

NO. XII.—CONSTITUTIONAL TREATMENT OF PILES.

Before passing to the other methods of treating hæmorrhoids by local means we must say a word or two of their constitutional treatment. In a proportion of cases, very large indeed, constipation has been an antecedent to their appearance. The old theory of their depending in any great number of instances upon torpidity and engorgement of the liver must, together with the notion of their consisting of dilated veins, be laid aside. Every one of experience will admit that a very large majority of patients suffering from hæmorrhoids have no indications of material hepatic disturbance. Nay, often until the "attack of piles" they state that their health had been perfectly good. Without denying that hepatic torpor may in some instances predispose to them, we must yet assert that the majority acknowledge a more mechanical causation still. Referring to the opinion as to their nature (see Commentary No. X.) that they consist of prolapsed and thickened Morgagnian columns, we shall have no difficulty in seeing how the impaction of indurated fæces in the lower part of the rectum, and violent strainings for their expulsion, may tend to produce them. When once they have been forced down the rationale of their subsequent increase both in size and vascularity is easily explicable. Looked at from this point of view their constitutional treatment also resolves itself into very simple measures. To empty the rectum, to keep the motions habitually relaxed, and, if possible, to restore tone to the mucous membrane, are indeed its main objects. The exhibition either of blue pill and castor oil, and of repeated small doses of epsom salts, the former being, perhaps, the more preferable, will meet the first two of these. The third is much less within grasp, and to its achievement the use of tonics, especially of nux vomica, offer the best, but still only a very uncertain means.

EXPECTED OPERATIONS.

At St. Thomas's, on this day (Saturday), Mr. Solly has three cases of operation for the removal of necrosed bone and two for caries of the tarsus, also one for urethral fistula. At King's College, on the same day, Mr. Bowman has a lithotomy and an amputation of the leg; and Mr. Fergusson, a case of plastic operation for contracted cicatrix of burn, and another for procidentia uteri.

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Medical Times & Gazette.

SATURDAY, APRIL 18.

THE LOWESTOFT TRIAL.

IN our last week's number we felt it our duty to state the many important facts which have come to our knowledge connected with the late trial of A. Matcham at Lowestoft, utterly refuting that part of the Judge's charge to the Jury as to his being a legally qualified Practitioner, and as to unfair dealing towards him on the part of the Medical men. Want of time and space have hitherto prevented us entering more fully into the three great questions upon which this trial hinged; they are as follows:—

- 1st. Was the use of instruments in such a case justifiable?
- 2nd. Were the injuries which were found after death caused by an improper and unskilful use of instruments?
- 3rd. Were these injuries the cause of the woman's death?

To the first of these questions we unhesitatingly answer No; the use of instruments was *not* justified in such a case.

In a woman whose pelvis was well formed, and who had already borne four children naturally, and with no peculiar difficulty, there *could* be no reason to warrant the application of the forceps to the head of a naturally formed fœtus of seven months, for if there had been real labour pains, the os uteri would have opened, and the premature child have slipped out.

Real pains at the seventh month of pregnancy could not have lasted so many hours (forty), because as soon as the os uteri had yielded to a moderate extent, a few straining efforts would have quickly expelled the premature child. The manner also in which the pains came on is *not* that of real labour pains. "The deceased was taken unwell," on August 19; "but no decided labour pains came on until one a.m. of Thursday, August 21." The fact of her continuing "*unwell*," some twenty-eight or thirty hours before "decided labour-pains came on," does not look very like the commencement of a real labour, but rather of an attack of abdominal pain similar to that which threatened miscarriage in the fifth month of her pregnancy. Our conviction therefore is, that actual labour had *not* come on, but that, as on the previous occasion in her fifth month, she was suffering from an attack of griping colicky pains, which the defendant had mistaken for genuine labour pains; that in all probability the os uteri was closed; and this opinion is confirmed by the statement that the pains were "severe, but short," which is well known to be the character of false pains, and *not* of real labour pains. The evidence also connected with the operation still further confirms our belief that the os uteri was not dilated; for it is stated in evidence that when Matcham applied the forceps, *it slipped*. Now if the parts had been in a state which rendered the application of the forceps to the head of the child possible, *i.e.* the os uteri fully dilated, and the head entering (or had entered) the vagina, nothing would have been more easy and

painless than to apply the forceps; and the blades, from the smallness of the head, would have been so much closed, and the soft cranial bones would have projected so much through the fenestræ, that the forceps *could* not possibly have slipped, and the gentlest traction would have drawn the child out. It is proved, however, that the forceps slipped twice; and it is evident that Matcham must have used great efforts, because when the second slip occurred "the defendant's knee slipped off the bed;" and each time "the patient complained of great pain, and said the instruments nipped and hurt her;" and at the second application she screamed out, "You are pulling me to pieces!" If the forceps had really been applied upon the head of the child, it could neither have hurt the patient as if it "nipped" her, nor would she have felt that the defendant was pulling her to pieces, still less would the forceps have slipped.

A careful consideration of the case shows that Matcham, having mistaken spurious pains for actual labour, had attempted to apply the forceps over the lower part of the uterus, in doing which he would unavoidably produce the sensation of "nipping" or pinching, besides causing the severest pain; that having hold of the uterus, instead of the child, it was no wonder the unfortunate woman complained that he was pulling her to pieces; and when the pear shape of the lower part of the uterus at the seventh month is borne in mind, it is no matter of surprise that the forceps slipped, although he had forced up the blades of the instrument through the vagina on each side of the uterus, in order to get a better hold, as is proved by the two lacerated wounds found by Dr. Webb and Mr. Worthington after death. We need hardly add that no proper or skilful application of any recognised midwifery instruments *could* have produced the two wounds, one on the right and the other on the left side of the vagina.

From the above analysis of the evidence our readers will doubtless have anticipated our answers to the second and third questions, which are,—that the injuries found after death *were* caused by the improper and unskilful use of instruments, and that the death of the patient *was* owing to these injuries, and to the ignorant and reprehensible manner in which labour was induced.

We cannot, for the life of us, understand how a supposed want of courtesy, or even downright hostility on the part of the Medical men towards the defendant, should have anything to do with the question whether he was guilty or not of the charge of manslaughter.

In the absence of any recognised qualification on the part of the accused to practise the Medical Profession, and in the face of what appears to have been a most serious case of malpraxis in Midwifery, we cannot believe that the Medical Practitioners in Lowestoft and its vicinity were at all blameable in declining to admit Matcham's right to attend patients, or in considering him in any other light than as an ignorant pretender. Yet we find the hired advocate of the prisoner employing the most insulting language towards the Medical gentlemen called for the prosecution, because, forsooth, they did not think it necessary to consult with Matcham as with a Professional brother. This same counsel had the insolence, for such we must call it, to attribute the upright and honourable conduct of Mr. Worthington, one of the medical witnesses in this trial, to mean and mercenary motives, and to assert that that gentleman had actually garbled and suppressed portions of evidence to arrive at selfish ends! From information communicated to us by correspondents residing in the locality, we learn that Mr. Worthington's character stands too high for honour and integrity, as well as skill, to be in the slightest degree damaged by the insulting and unjustifiable remarks of the counsel; and that, on the contrary, the disgraceful features which distinguished his cross-examination will redound to Mr. Worthington's credit, and to the discomfiture

of his legal assailant. It is a painful circumstance belonging to the times in which we live, that the respectable and honourable members of our Profession are wholly unprotected in our courts of law, while the most tender care is bestowed upon the interests of the quack and the pretender. The most downright nonsense may be talked by judge and counsel upon medical matters, and no one is allowed to expose the absurdity, and the rubbish uttered as medical law from the bench and the bar passes uncontradicted into the minds of the people.

THE POISON TRADE.

A case of accidental poisoning, as yet happily unattended with loss of life, though it is still uncertain whether that of the principal sufferer may not be sacrificed, has recently occurred in Ireland in the King's County. The facts appear to be as follow:—The Rev. James Alexander, LL.D., rector of Tessaurean in the diocese of Meath, was slowly recovering from a severe attack of cerebral congestion, and was, in consequence, restricted to the use of farinaceous food. On Monday, the 16th of March, a servant was sent to the shop of Mr. Edward Whitfield, in Ferbane, for one pound weight of arrow-root. The shopman, named Denis Grogan, not having so much in a bottle which he placed upon the counter, took from a paper parcel a sufficient quantity of a white powder to make up the required weight. On the messenger's return some of the supposed arrow-root was prepared in the usual way, and Dr. Alexander had some of it for dinner. Fortunately, Miss Mary Jane Alexander had some prepared also for herself, and had taken only a spoonful or two when, perceiving an unusual taste, she ran up stairs to prevent her father using what had been sent to him. He had swallowed about five small spoonfuls, and was soon attacked with violent pain and sickness. The cook and butler, who also had tasted the arrow-root, were similarly affected, as was Miss Alexander herself. Happily, however, the young lady's presence of mind did not forsake her, and she instantly administered mustard emetics to the three sufferers, and took one herself. Dr. Fry, who had previously been in attendance, was then sent for, and had the able assistance of Dr. Peirce, of Banagher. These gentlemen found a large quantity of mineral poison both in the food prepared and in the powder which remained, and had no doubt that the portion taken out of the paper to make up the weight was arsenic. The butler suffered dreadfully for three days, the cook was exceedingly ill for one day, Miss Alexander is recovering, but Dr. Alexander is not yet out of danger. An investigation into the case took place at Ferbane petty sessions, when informations were taken by the magistrates against Grogan for the misdemeanour of carelessly selling poison, whereby life was endangered. He was admitted to bail, himself in £40, and two sureties in £20 each, to take his trial at the next quarter sessions in Parsonstown. His master was tendered as surety, but was rejected on the ground that it was probable that the law advisers of the Crown might, on perusing the informations, be of opinion that a similar legal offence had been committed by him, in the careless manner in which he kept articles of food and poison together for sale. In answer to an inquiry we instituted as to the nature of the business followed by Whitfield, we have received the following:—"Whitfield is a grocer, but has always been in the habit of selling poisons (such as are used by farmers in making sheep-water, etc.), and even medicines of various kinds. Mr. Alexander's steward and a gentleman went to his house after the accident, and found rice, corrosive sublimate, jalap, and oxalic acid in different papers in the same drawer, and all under the care of an ignorant boy."!! Food, physic, and poison lying indiscriminately together! Comment on such a case is needless.

and, indeed, as the matter is about to be the subject of judicial investigation, it might be out of place at present. Probably no example could be quoted capable of so powerfully demonstrating the imperious necessity which exists for the immediate interference of the legislature. Be the coming session of Parliament never so short it must not be allowed to elapse without an Act being passed upon the subject. We trust Sir George Grey will be prepared to introduce his promised measure at the earliest possible moment. We would suggest that the sale of poisons should be restricted, under heavy penalties, to the more respectable class of druggists, whose knowledge of the physical and chemical properties of these agents, as well as of the proportions in which they prove dangerous, should be tested by a competent board, empowered to issue, after a suitable examination, the necessary licence to those whose knowledge on those points, *as well as their general education*, should be found sufficient. Frequent and strict inspection of the licensed establishments should also take place, and a principal duty of the inspectors should be to ascertain that all poisonous substances be kept apart from less active medicines, and from all articles used as food, and that they be properly and distinctly labelled. It is evident, moreover, that the measure should extend to every part of the United Kingdom. It has been argued that the difficulty of adequately enumerating the substances which should be regarded as poisons, is an impediment to legislation, but it appears to us that this difficulty might be got over by leaving the specification, with the power of altering the list from time to time, to the Medical Council to be created under the proposed Medical Reform Bill; or until the enactment of the latter measure, to a Committee of the College of Physicians, or to a Medical Commission appointed by the Crown. The Board of Health is of course incompetent to deal with Medical questions under its present constitution. An opinion has been generally entertained that Ireland was more fortunately circumstanced as to a legal control over the *sale* of poisons than this country; such is, however, not the case. It is true, the Apothecaries' Act of 1791, of the Irish Parliament, contains some clauses (the 28th, 30th, and 31st,) on the subject, but these go merely to prohibit the Licentiate of the Hall from "grinding, compounding, selling, or keeping any arsenic, oils, or colours for painters' use, in the shop or room wherein he compounds medicines;" (a) and to the laying down directions to be observed by every apothecary, druggist, or other person selling any quantity less than one pound weight of arsenic. The sale of a larger quantity appears to be subject to no restriction whatever, and even the directions given as to the vending of smaller quantities are, by a singular defect in the statute, rendered incapable of being enforced; for while a penalty of twenty pounds, *to be recovered as hereinafter mentioned*, is attached to non-observance by the 30th section, the subject is not reverted to in the 31st, which is the last in the Act. In all other respects the trade in poison appears to be as mischievously free in Ireland as it is here; and surely whatever may be our feelings as to unrestricted commerce in other matters, free trade in such deadly agents is not to be tolerated. The case we have this day quoted is one which could not have occurred had a judicious statute, embodying the principles we have suggested, been in force. In conclusion, we would express a hope that the

framers of the Imperial Pharmacopœia which we trust ere long to see published under the auspices of the proposed Medical Council, will follow the example of the authors of some of the continental works of a similar kind, in stating after each of the more active drugs and preparations, its medium and its *dangerous* doses.

It is evident that the Act of the 14th of her present Majesty, "to regulate the sale of arsenic," which provides that the drug shall not be *sold* in less quantity than ten pounds at any one time, without the previous mixture of soot or indigo, containing no directions as to the *keeping* of the poison, does not apply to the present case, nor afford security against such carelessness as we have described.

Since the foregoing was penned, we have received intelligence of the death of Dr. Alexander, which took place during the night of Wednesday, April 1.—Dr. Alexander was the second son of the Most Reverend Nathaniel Alexander, D.D., who held the bishopric of Meath from 1823 until his death in 1840, and who enjoyed episcopal rank for the unusually long period of thirty-nine years.

The investigation into this melancholy case, which was adjourned from the 3rd to the 13th instant, in order to admit of the tissues and blood of the deceased being submitted to examination by Dr. Geoghegan, Professor of Medical Jurisprudence to the Royal College of Surgeons in Ireland, was concluded on Monday last. Drs. Fry and Peirce, the Medical attendants of Dr. Alexander, having given their evidence, Professor Geoghegan stated that he had found arsenic in abundance in the arrow-root, and in the gruel prepared from it, which had been handed to him for analysis, but that he had been unable to discover a trace of the poison either in the contents of the stomach, or in the viscera of the deceased. Under the circumstances of the present case, however, added Dr. Geoghegan, more especially taking into account the duration of the illness, such a result does not at all militate against the presumption of death by poison; the character of the symptoms, taken in all their bearings, together with the nature of the morbid appearances, and the presence of arsenic in the gruel, left no doubt on his (Dr. Geoghegan's) mind, that death in the present case was the result of arsenical poisoning.

No evidence was produced on the part of the accused, and, after a short deliberation, the Jury returned the subjoined verdict. We are glad to see that they have appended to their finding observations similar to those we have ourselves made upon this unfortunate occurrence.

The following is the verdict:—"That on the 16th of March 1857, a messenger named Charles Quinn was sent from Killygalley to the shop of Mr. Edward Whitfield, of Ferbane, to purchase arrowroot powder, which he received from Mr. Whitfield's shop assistant, named Denis Grogan. That the said Quinn took the arrowroot to Killygalley, and delivered it to the daughter of the Rev. James Alexander, who had made it into food for her father, which was given to him. That the arrowroot so given contained a quantity of mineral poison, to wit, arsenic, wilfully and without due caution so delivered to the said Quinn by the said Denis Grogan. That the Rev. James Alexander shortly after got ill, having eaten of the food, and languished until the 2nd of April, when he died from the effects of poison so mixed through the arrowroot aforesaid, and not otherwise.

"We cannot separate without deploring the unhappy occurrence which gave rise to this inquiry, and are of opinion that the existing laws are quite defective, permitting as they do the sale of poisonous drugs by grocers, and other unqualified persons; and that improved legislation on the subject is most essential."

Just before the dissolution of Parliament the Marquis of Westmeath, in his place in the House of Lords, mentioned the recent death of a relative of his own from accidental poisoning, and the mournful case we have just detailed adds

(a) The Irish statute, 1 Geo. III., c. 14, entitled, "An Act for Preventing Frauds and Abuses in the Vending, Preparing, and Administering Drugs and Medicines," and commonly called Lucas's Act, under which the College of Physicians are empowered to appoint Inspectors of Apothecaries' and Druggists' shops, and which was made perpetual by 30 George III., c. 45, sect. 11, also contains a clause, sect. 26, prohibiting the vendors or compounders of medicines from keeping arsenical preparations in the room, etc., in which they compound or dispense medicines "for the health of man's body."

another from the higher ranks to the sad list of those who have fallen victims to the present uncontrolled condition of the Poison Trade. Lord Westmeath's case also illustrates some remarks we made a few days ago on Boy Dispensers in Druggists' Shops:—The poison was sent by mistake from a chemist's establishment at Weymouth. There were only two boys in the shop when the medicine was inquired for, and the oldest was not more than 14 years; the consequence was, that poison was sent, and administered by the child's own mother. A verdict of manslaughter was returned by the Coroner's Inquest against the boys, but the bills were ignored at the last assizes by the Grand Jury.

THE WEEK.

By order of the Director-General of the Medical Department of the British Army, the form of starch bandage described and employed by Baron Seutin was exhibited at the Medical Board-office, in Whitehall, on the 28th ult., to the Medical officers now proceeding to China. This invention by Baron Seutin, which has been described by him as the *amovibile* bandage, is well known here, and has been found of great practical value in the treatment of fractures generally, and is likely to be especially useful in military practice. We are assured that in a case of simple fracture of the lower extremity the utmost precaution necessary is to keep the patient in bed for eight days, but in many cases the patients are able to walk about on the day succeeding the accident. This method of treating fractures from gun-shot wounds was employed in the Russian army during the Crimean war, and with such success that the wounded were carried over vast tracts of country, from Sebastopol to the hospitals in the interior, without any unfavourable consequences. Baron Seutin is a military medical officer, and a retired Surgeon-in-Chief of the Belgian army. He served in the battle of Waterloo, and at the siege of the citadel of Antwerp, and at the express invitation of the late Emperor of Russia he taught his practice to the medical officers of the Russian army, visiting, in 1852, all the principal garrisons of the empire. We need scarcely add that the chief recommendations of this bandage are that it keeps the injured bone in strict apposition, while it permits the patient to move the limb at a very early period; and it is thus eminently serviceable in military warfare, where it is necessary to remove the wounded as early as possible.

The alarm excited by the murrain and the sale of diseased meat will not be without its good effect if it lead us to remove existing prejudices against certain useful, but unpopular, articles of diet, and to search in new directions for cheap and wholesome nourishment. If meat become bad and dear, where are we to find good and cheap food? Let us see how far we can answer the question. Amongst many nations horse-flesh is used as food, and is considered second to none in sustaining power. It is not to be expected in England, however, that this practice will ever come into force, since sound horses are too valuable for the shambles, and unsound ones, as a general rule, are not commendable as food. But, under proper arrangements, there would be in this country an unlimited supply of fish of the most excellent kinds. Here is a food at once healthy in structure, nutritive in character, and delicious to the taste. Yet such is the perversity of our high and mighty folk, that not a tithe of the finny tribe floating round England find their way to the poor man's board. During a great plague from over-feeding, amongst the unhappy convicts of Freemantle-establishment in Western Australia, it has been shown that these worthies could have kept their bodies nourished and their minds relieved by fishing for their exist-

ence in the Freemantle Bay. But official ignorance said, No! Lie at your ease, men, with your hands at your sides; twiddle your thumbs; bask in the sun; get ennui from having nothing to think of; eat, drink, and be merry: die of dysentery and engorgement. The edible sea-weeds afford other specimens of diet, which might be well turned to practical account. The labours of Dr. John Davy and Dr. Apjohn on this point have shown that the percentage of nitrogen in many of the more edible sea-weeds exceeds not only that of potatoes, beetroot, mangolds, and Swedish turnips, but even of wheaten flour itself; while in addition, as Dr. Davy remarks, these algæ contain iodine and bromine, the value of which agent may be inferred from the fact, that wherever the esculens algæ are used commonly as food, bronchocele, scrofula, and pulmonary consumption, are diseases almost unknown. Lastly, there are many inland vegetable substances of great nutritive value, but as yet almost unrecognised as foods. Many of the fungi are poisonous, others are edible, and the common puff-ball, which a modern physiologist has burnt into a very effective anæsthetic smoke, is esteemed on the Continent as a great delicacy when properly cooked. In Thibet the roots of young fern are used as food, and are considered equal in delicacy to asparagus. But we must stop. There are a hundred more things at hand, and some day we will tabulate them. Meanwhile we remark that the poor must be fed; and as it is mere childishness to think of taking from them unwholesome food till wholesome can be supplied at the same rate, good food and cheap is the argument to be worked out.

At an inquest lately held in Doncaster, upon a man who died suddenly while carrying some goods to the railway station, the Medical Coroner who presided gave his opinion that the cause of death was the rupture of a blood-vessel in the region of the heart, perhaps accelerated by the exertion of carrying the burden. Without denying that this may have been the case, it appears to us that a Coroner oversteps the line of his duty when he undertakes the functions of a medical witness, whose province it is to give such information to the Court as he may have derived from a knowledge of the case, or when any doubt exists, from a post-mortem examination of the body. In the instance to which we now allude, it appears that a medical gentleman was called to the deceased, but arrived too late, as life was extinct. In the absence of any information respecting the man's general health, and without a post-mortem examination, the opinion of the Coroner must have been a mere guess, which, although it may have satisfied the jury, is quite inadequate to meet the demands of medical science, or even to fulfil the ends of public justice.

We are sorry to perceive that the unseemly altercation between the Magistrates and the Coroners in various parts of the country, on the subject of the fees claimed by the latter functionaries, is still carried on with great bitterness. In one case, the Preston magistrates unanimously refused to allow the expenses of an inquest upon a man who had died of injuries received in falling from a horse which had taken fright. We cannot agree with this decision, at least if the reasons on which it was based have been correctly reported to us. The case was clearly one of accidental death, and if the Coroner had not held the inquest, he would have been liable to a penalty. The facts alleged, namely, that the man survived eight days after the accident, and that no blame was attributed to any one, constituted no valid grounds for neglecting to hold an inquest. In another instance the Coroner stated that at an inquest held at Chorley, upon a woman supposed to have been poisoned by her husband, (to which case we have alluded in our pages,) he should receive only

£1 6s. 8d. for attending three whole days at the investigation; and that he had been compelled to refuse payment of an account sent in to him of £26 for chemical analyses made by one of the medical witnesses. In reference to the latter circumstance, the Act of Parliament clearly allows only two guineas for a post-mortem examination, together with a chemical analysis; but this sum is manifestly insufficient where complicated and laborious processes are necessarily put in operation. The whole subject of the jurisdiction of the Coroner, and of the method of remunerating him for his services, requires revision, and we hope that the new House of Commons will find time to make inquiries upon the present system, and to devise means for removing some of the anomalies which now exist in the Coroner's Court.

A melancholy case of poisoning by water-hemlock, the *cicuta virosa*, has just occurred near Sunderland, and two young men have fallen victims to their imprudence in eating this very noxious herb, probably mistaking it for a wholesome plant. The species in question belongs to the tribe of *umbelliferae*, an order which is somewhat paradoxical in its sensible properties,—for while some of its members are wholesome and nutritive, as the carrot, the parsley, and the parsnip, and others are medicinal or carminative, as the coriander, the dill, the anise, the cummin; some few on the contrary are highly deleterious, especially the common hemlock (the *conium maculatum*), the hemlock dropwort, (the *œnanthe crocata*), and the water-hemlock, which has just been mentioned as the cause of the recent deaths. The common celery, which is also an umbelliferous plant, is poisonous in its wild state, but becomes wholesome by cultivation. It can scarcely be a matter of wonder that fatal accidents occasionally occur from the incautious use of some of these poisonous umbelliferae, when there is such an extraordinary diversity of operation among genera which are closely allied in their general appearance and in their internal structure.

We commence this week a series of Reports on the Relations of Food and Disease, in which we hope to furnish our readers with the result of a course of observations and experiments made in accordance with the line of investigation indicated in a leading article last week. The first Report will be found at page 392. "On the Connexions and Relations of Disease in Man and the Lower Animals," and we have great satisfaction in stating that in following out this important question we have secured the invaluable assistance of Professors Simonds and Spooner of the Royal Veterinary College. An abstract of M. Soumille's paper on the characters and effects of diseased meat will be found at page 397. It epitomizes the present state of knowledge on this branch of the question.

SOME letters have just appeared in the *Times*, on the poisonous properties of the cyanide of potassium, a substance at present much employed in photographic processes. The cyanide of potassium, taken internally, is exactly analogous in its operation to hydrocyanic acid, being a sedative poison. The questions, however, now started are, whether it is capable of causing irritation when applied externally to an abraded surface, and of symptoms of poisoning if it be absorbed. One of the writers who describes its effects from personal observation, states that inflammation has followed its introduction into a slight graze in the skin. These effects are well known to photographers, and are easily explained by the salt acting as a mechanical irritant. A train of nervous symptoms has been described by one writer, apparently produced by the poisonous action of the salt when absorbed, but more accurate observation is required to determine this point.

The birth of a Princess, on Tuesday, took place while the Queen was under the influence of chloroform administered by Dr. Snow. Symptoms of approaching labour manifested themselves on Monday evening, but Dr. Locock and Dr. Snow were not sent for until 2 o'clock on Tuesday morning. The labour was more lingering than in any of Her Majesty's previous confinements, and it was not until 11 o'clock that Dr. Snow was requested to administer the chloroform. After some time it appeared that the anæsthetic seemed not only to relieve pain, but to retard the labour, and it was discontinued for a time. It was repeated, however, at intervals, and the Princess was born at 45 minutes past 1, Her Majesty not being in a state of total insensibility, although unconscious of pain. Such are the medical facts of the case. The domestic history is more curious, and reminds one of the famous story of the Royal plate being sent to the railway by a common carrier's cart. It was known on Monday night at the Palace that labour was approaching, yet when the Queen, in her extremity, sent for Dr. Locock and Dr. Snow, a common cab from the nearest stand was the only vehicle procurable, and a very shaky specimen indeed first went to Hertford-street for Dr. Locock, took him to the Palace, and then drove off to Sackville-street for Dr. Snow. The public have a vague idea that Masters of the Horse, and Grooms-in-waiting, and Equerries, and Gold Sticks, and Silver Sticks, and a hundred other people about the Royal person must be of some use, but it seems that when they are wanted, No. 2011 from the cab-stand is as necessary for Queen Victoria as for Mrs. Sarsnet the wife of the Pimlico haberdasher.

Dr. Greenhow's report on the apprehended murrain is an attempt to excuse the Government for their absurd Order in Council on the importation of foreign cattle which we exposed last week. The object is to show that the disease now raging at Hamburg is not a contagious disease, but the pleuropneumonia long epidemic in England. Dr. Greenhow has not visited Hamburg lately, but the *Times* Correspondent, resident there, writing on the 7th instant, perfectly agrees with the view we took of the case. He says:—"It is thought somewhat singular, if not rather eccentric, on the part of the British Government that by the recent Order in Council the importation of cattle and raw hides from the Gulf of Finland, and the Russian, Prussian, Mecklenburg, and Lubeck ports in the Baltic, into England should have been prohibited, while the trade in oxen, etc., from those in Holstein and other provinces along the coast of the German Ocean and the Elbe should continue to be allowed, from which places, moreover, the greater portion of the diseased cattle would be exported to Great Britain, and but comparatively few from the Baltic, on account of the long voyage and greater cost and risk of transport. In short, if from the Prussian districts adjacent to the Grand Duchy of Mecklenburg, and from Mecklenburg itself, and likewise from Lubeck, there have been any cattle sent to England, or are likely to be sent at any time, they are generally transported thence overland to this port for shipment, and there is even now nothing to prevent these shipments being made, as has heretofore been the case, in spite of a dozen British Orders in Council, so long as the ports of the Elbe, Eider, and Weser are excluded from their operation, for no one can possibly find out whence cattle come for exportation to this place in particular, since the dealers are so well versed in the management of the business they have in hand as to avoid the proper eluc being given to their movements, and a number of murrained oxen in the first stage of the disease can be as easily put on board ships of transport to England as in any other port conveniently situate, and not included in any Order of Council prohibiting exportation, thence. Not a single word has been hinted in the prohibition

in question about cattle from Holstein, while it is notorious that the murrain among cattle exists throughout the whole of the duchy, and is even on the increase than otherwise. And why not? This appears certainly singular above all, and is looked upon as either an oversight, or as showing a great want of information on the subject in relation to the murrain among cattle over here."

Dr. Letheby's last report on the Sanitary State of the City is likely to lead to some good result. It is a most praiseworthy document. The following passage leads to the hope that Chemistry may yet do much to explain the origin of fever. "So close and unwholesome is the atmosphere of some of the rooms, that I have endeavoured to ascertain by chemical means, whether it does not contain some peculiar product of decomposition that gives to it its foul odour and its rare powers of engendering disease. I find that it is not only deficient in the due proportion of oxygen, but it contains three times the usual amount of carbonic acid, besides a quantity of aqueous vapour, charged with alkaline matter that stinks abominably. This is, doubtless, the product of putrefaction, and of the various foetid and stagnant exhalations that pollute the air of the place. In many of my former Reports, and in those of my predecessor, your attention has been drawn to this pestilential source of disease, and to the consequence of heaping human beings into such contracted localities; and I again revert to it because of its great importance, not merely that it perpetuates fever and the allied disorders, but because there stalks side by side with this pestilence a yet deadlier presence, blighting the moral existence of a rising population, rendering their hearts hopeless, their acts ruffianly and incestuous, and scattering, while Society averts her eye, the retributive seeds of increase for crime, turbulence, and pauperism."

The treatment of Cancer which is now under trial at the Middlesex Hospital has excited a large amount of attention, both in and out of the Profession. We have received so many communications on the subject—many of them founded evidently on misconception—that we are induced to explain, so far as we are able, the circumstances under which the authorities of the Hospital have sanctioned the trial within its walls of a plan of treatment not as yet made known to the Profession at large. Dr. Fell is an American Surgeon, who came to this country about eighteen months ago, professing to be possessed of a method of treating cancer superior to any at present in use. He ascertained that at the Middlesex Hospital there was a large endowment for cancer cases. He made a proposal to the Governors of the Hospital, that he should be allowed to treat, under certain conditions, a given number of patients in the Hospital, under the inspection of its Surgical staff. The conditions were these:—That he should communicate to the Surgeons of the Hospital, in strict confidence, the nature of his applications and the mode of their preparation; that, having done so, he should be permitted to use them on patients in the Hospital, under the inspection of the Surgeons, to whom he should communicate everything relating to his plan of treatment; that he should publish to the world his plan and his remedies within six months from the time of his beginning his trials; that the Surgeons should not make use of the information they had received until this period had expired; but that if Dr. Fell failed within that time to make his plan public, they should be at liberty to do so; and, finally, that the investigations should be carried on in the presence of the Surgeons only, and that no other person should be admitted, unless with the concurrence of Dr. Fell. The proposal thus made by Dr. Fell was at once agreed to by the Medical Committee and Managing Board of the Hospital;

indeed, they had not the option, if they had the wish, of doing otherwise; for, according to the terms under which the endowment was founded, they are bound to make trial of any remedy which may appear reasonable, and which is not to be preserved as a secret. Had this not been the case, we question whether they would have been justified in refusing to make their extensive cancer establishment available for observations on the treatment of that disease, which might prove of great value, and which, if useless, would be proved so to the world, and people's minds be thus set at rest. Perhaps, altogether for the cause of science, the course proposed by Dr. Fell was the best. The loss of six months is of little consequence compared with the advantage of having his system calmly and dispassionately watched and analysed during that period by Surgeons who, from their long connexion with the Hospital, must have had every opportunity of seeing and treating cancer in all its phases. Had a crowd of visitors, or of students, been admitted, the same calm investigation could not have been carried on, and the treatment would have been written about—partially and imperfectly—before Dr. Fell could have had the opportunity of publishing his whole plan. We find that Dr. Fell's work will soon be out, and in due course we shall look for the reports of the Surgeons of the Hospital; but they will be wise not to commit themselves to an opinion until ample time has been afforded for watching, not the treatment only, but its results. We have been told that Dr. Fell has been perfectly candid and unreserved in his communications with the Surgeons of the Hospital, and that they have not had the slightest ground of complaint against him for the manner in which he has carried out his part of the agreement. Whether his plan of treatment be worth anything or not, we are sure that those gentlemen will be equally fair in their conduct towards Dr. Fell, and that they will not be hurried into a breach of contract. Half the period agreed on has now nearly elapsed, and it is better that full time and full opportunity for calm observation should be given before opinions are hazarded on one side or the other. When the time comes we shall be prepared to go fully into the matter.

We beg to direct the attention of our readers to the details of the first case in which death from amylene has occurred, given at page 380. Dr. Snow's account of the accident is full in all particulars, and he deserves the thanks of the Profession for having brought it under their notice without delay, and in the most open manner. It may be observed that in this case, as well as in Mr. Paget's, a few weeks ago, Dr. Marshall Hall's method of artificial respiration was tried, and in neither does it appear to have been efficient.

REPORTS

ON

THE RELATIONS OF FOOD AND DISEASE.

No. I.

ON THE CONNEXIONS AND RELATIONS OF EPIDEMIC DISEASES IN MAN AND THE LOWER ANIMALS.

THE fact is undoubted that, at present, a mysterious alarm pervades the country regarding the existence of a "murrain" on the Continent, and the apprehension of a disease among cattle at home. The alarm is of a mysterious kind, because the Medical Profession, with the exception of Veterinary Surgeons, and the country generally, are ignorant of the nature of cattle diseases; and the very name of "murrain" does not convey, even to a Medical man imbued with distinct and clear pathological notions, a description of a definite disease. The mystery thus associated with the supposed exist-

ence of a cattle distemper of necessity produces a feeling of alarm, which, considering the interests at stake, is far from being unjustifiable. Whether that alarm is with or without foundation remains yet to be seen. At the same time it must be noticed, that on no subject is the feeling of alarm more likely to be maintained by interested persons than on topics of this nature, which affect so many interests.

It has been reported that a very fatal and contagious "murrain" among horned cattle exists on the Continent, and especially in those states from which cattle are imported into this country, namely, in Holstein and the adjoining countries. The disease has been described as a pulmonary "murrain," and is supposed by some to be identical with the "lung disease," which has proved so destructive to the grazing and fed cattle, as well as to the dairy stock of Great Britain and Ireland at various periods during the past half century. We do not know that such a disease has been proved to be infectious or contagious, although it is believed to be so by German veterinarians. It has been observed to arise spontaneously or sporadically in a locality, pursue an epidemic course for some time, and ultimately disappear. We cannot tell "whence it cometh, or whither it goeth;" and England, Scotland, Ireland, the Continents of Europe and of America, have each by turns, and some of them contemporaneously been the scenes of severe epidemics of the lung "murrain," to which the character of a plague or pestilence may be applied with strict propriety.

But another "murrain" sometimes exists among cattle, which is all the more alarming, because it is more generally believed to be contagious. It is totally different from the pulmonary "murrain," and is said to be spontaneously developed in Bessarabia and the countries of Southern Europe, from which it is also said never to be absent, and whence it spreads by contagion into the surrounding districts of Poland, Prussia, Austria, and Turkey. It is called by the Germans the "Rinder pest," or "Steppc murrain."

Since the 9th of May, 1856, 20,000 animals have been slaughtered in Prussia, exhibiting symptoms of this disease. At present this form of murrain undoubtedly exists in Poland; and notwithstanding the strictest precautions employed by the Prussians, our Government has received intelligence that it has passed into Austria and Prussia. The precautions to prevent the spread have been so strict, that detachments of troops were stationed along the frontier at all the points of egress from Poland below Thorn. "Rags, hides, hoofs, hay, wood, and similar articles, likely to have been in any way connected with cattle, and all persons suspected of having transactions with cattle were forbidden to cross the frontier."

Nevertheless, and in spite of all this vigilance, such is the subtle mode in which this disease propagates itself, that it has penetrated into Silesia, in the neighbourhood of Breslau and Appeln. The transmission of the disease is said to have been effected by diseased cattle purchased in Galicia. Thus far the disease is traced, and is said to be limited to the infected herd. Such is the information given by Dr. Headlam Greenhow, in his first report to the Board of Health, published on the 11th inst.

Seeing that the spread of a contagious disease among cattle on the continent of Europe has been thus unfortunately thrust upon our notice, we take this opportunity of directing the attention of the Profession to one of the most important topics of Pathology, namely, the connexion which history has shown to exist between diseases which spread epidemically among the people, and diseases which spread in a similar manner, and sometimes contemporaneously, among cattle. In short, we mean to notice briefly the

CONNEXION BETWEEN EPIDEMICS AND EPIZOOTICS;

and before doing so, let us make the remark, that it is greatly to be regretted that our Profession does not devote special study to Comparative Pathology. Much, we know, is to be learned from a study of the disease of cattle, of horses, and of the lower animals generally, both before and after death; and the accomplished teachers of our Royal Veterinarian school can show the pathologist, who studies only from human diseases, such phenomena of morbid states in the lower animals that must be seen to be appreciated; and if not known or not appreciated, the pathologist has yet to learn much of his Profession. We have the welcome assurance of two of our most distinguished veterinarian brethren, Professors Simonds and Spooner, that they will lend us their assistance in bringing to

light much hitherto unknown regarding the diseases of cattle in their relation to human pathology.

The importance of the subject cannot be exaggerated. It involves a political question, namely, the wellbeing of a large portion of the community. It has to do with their wellbeing in three ways:—1. It intimately affects those who rear cattle, and who derive profit from their sale. 2. It affects the community in regard to the sufficiency of the supply of animal food, and 3. in regard to the wholesomeness of the flesh which they may have to eat. There may be loss to the breeder and rearer of cattle from disease. There may, by consequence, be an insufficient supply of food to the inhabitants of the country. Lastly, the flesh of animals sold for food may not be fit for man to eat; it may be injurious to health, or be an active agent in the production of disease.

That a connexion does exist between the diseases of man and the diseases of beasts has long been a popular belief, and the proofs of this connexion may be enumerated as follows:—

1. There are certain diseases which every pathologist knows can be transmitted by inoculation or other modes of contagion from the lower animals to man.

2. Epidemic outbreaks of disease among the people have in very many instances been contemporaneous with distemper or "murrains" of a specific kind in cattle and other animals.

3. Distempers of a specific and peculiar kind in cattle and other animals have preceded, at intervals, epidemic diseases in the inhabitants of those regions where the epizootic had prevailed, so as to render cause and effect highly probable, if not altogether apparent.

4. Diseases are developed from the use of the secretions and flesh of animals as food, which have not been in a state of health during life and at the time of death. Such diseases are of the zymotic kind, and are the result of what may be termed "food poisons," derived from three sources, namely, (1) Poisonous fish, (2) Poisonous meats, and (3) Diseased animal secretions, such as milk.

5. There is much milk sold in the metropolis of large towns produced from sick cows, and there is also much meat sold of animals that have been killed, knowing them to be at the time diseased, the flesh of which when dead cannot be easily proven to be off a diseased animal, but the persistent pernicious influence of which, if persevered in as an article of food, is not beyond the reach of proof.

6. The epidemic constitution, which manifests itself in the human community by a certain form of disease, extends itself sometimes also to the lower animal creation, and makes itself manifest at the same time amongst them by epizootics of various kinds, which cannot in all instances be regarded as diseases similar in kind, or even analogous to the disease which is epidemic amongst the human race at the same time.

Having given evidence of the existence of these proofs of a connexion between epidemic and epizootic diseases, we establish a general and universal pathological truth,—namely, that epidemic and epizootic diseases are often developed under similar circumstances, or "epidemic constitutions," common to man and animals; and that they mutually act and react upon each other. It is also worthy of notice in this place, that the analogues in animals, of diseases in man, cannot in every instance be established. The human and comparative anatomist knows how difficult it is to establish the analogues of parts in the anatomy of the brute creation, compared with those in human anatomy; and those who study comparative in connexion with human pathology, will find that it is no less difficult, in many cases, to establish the analogues of disease in brutes, compared with the human creation.

The sources of our knowledge and information regarding the topics we have now enumerated and purpose to consider in detail, are of a varied kind, and widely scattered. In France and Germany the connexion and association of diseases in man and animals is the subject of regular and organized attention; in this country this topic, and the questions of political importance on which it immediately bears, are comparatively neglected.

The work in this country which contains the greatest amount of recorded facts relating to this subject is the first volume of the reports on the census of Ireland for 1851. The amount of labour, research, and accuracy of reference contained in this work is worthy of the greatest praise; and renders it, perhaps, unequalled as a scientific report.

By the information contained in this report, together with

other isolated observations, combined with our own practical experience in human and comparative pathology, we shall attempt to give an account of the present state of our knowledge regarding the connexion of epidemics and epizootics. But, as the census commissioners remark,—“It is only when the records of other countries shall have been searched with the same diligence and with a like object, and tabulated after some such arranged plan as that which we have adopted, that the waves of pestilence, which have left their tracks upon the sands of time, will enable us to speculate upon the laws by which they undoubtedly seem to be governed.”

1. With regard to the proofs which come under the first head of those which establish a connexion between the diseases of man and those of beasts, it is unnecessary for us to dwell.

The history of vaccination, and of the inoculation of various diseases, such as glanders, farcy, and hydrophobia, furnish us with a melancholy list, and to prevent which in future, we have, alas! no prophylactic.

2. Numerous examples are on record of the cotemporaneous occurrence of epidemics and epizootics. So long ago as the beginning of the fourteenth century one of the earliest and best marked outbreaks of typhus fever devastated Ireland like a pestilence, in 1324; and associated with it there prevailed a dreadful distemper among cattle, and that people who eat of their milk and flesh suffered from fever and dysentery. The “epidemic constitution” of the present century abounds with numerous instances of an analogous kind. It is also to be noticed, that these epizootics have not been peculiar to any latitude, nor have they been entirely confined to domesticated animals. The “pestilential constitution” has even sometimes spread over the entire organic world, equally affecting animal and vegetable life.

The following are instances of cotemporaneous epidemic and epizootic diseases during the last half century:—

In 1800 and 1801 fever prevailed in Ireland to an alarming extent. The fever was of such an epidemic virulence that unfortunate patients died by the roadsides. Calves were subject to an infectious disorder called the “black leg” or “quarter-ail.” It generally seized the highly-bred and highly-fed animals; and, although the disease did not spread much then, we have been informed that it is now one of the great sources of mortality and loss among our finer and improved breeds of cattle at the present time.

In 1802, epidemic and putrid fevers were prevalent throughout the country. Horses had a disorder similar to the influenza. It was attended with severe hard cough, laborious, difficult respiration, fever, and great prostration of strength. It terminated favourably by a discharge from the nostrils. With some it ended in farcy, and some it killed with inflammation of the heart and lungs. Many calves died.

1803. The great epidemic of influenza which overspread Europe this year, commenced in Ireland. It was preceded by epidemic diarrhoea, and there was also evidence of the prevalence of disease amongst the lower animals shortly before and simultaneous with the outbreak of influenza. Horses and cats were chiefly affected. Besides influenza, dysentery, and puerperal fever prevailed; and epizootics were very general throughout the epidemic constitution of the fever. A bloody murrain prevailed among horned cattle, and many died, and calves died in the rearing. Dogs and cats also suffered. The form of the disease in cats was such that their heads swelled, and a discharge proceeded from the nose and eyes attended with vomiting. While hares and cats suffered most, horned cattle also died of the black quarter, and cows, sheep, and lambs suffered.

In 1822, fever of a malignant type and of long duration prevailed in Ireland, cotemporaneously with great mortality amongst cattle. So great was the distress in Ireland that many of the lower classes ate the carcasses of cattle that died of starvation, and dysentery became prevalent.

1823. So remarkable was the malignancy of the “epidemic” constitution about this period, that it interfered with the recovery of patients after surgical operations. Slight punctures received in dissection were often succeeded by suddenly fatal attacks of typhus disease. Epizootic diseases were characterised by glandular tumours, both internally and externally, on the same animals. The year was marked by the ravages of ague, small-pox, and fever, in Ireland. In Lapland the cattle suffered greatly from “murrain,” upwards of 5000 head were

carried off; and wolves even were destroyed by it, so intense and general among the lower animals was the distemper.

1829. Another period of famine and distress commenced in Ireland at this time, succeeded by pestilential diseases. Dysentery, ague, fever, scarlatina, Asiatic cholera, and influenza prevailed. The epidemic constitution affected vegetable life. An epizootic, which partook of the nature of cholera, caused a great mortality among swine. At this time also, as well as during the preceding year, an epizootic prevailed among cattle in the dairies of Paris and Alfort, as well as in other parts of France, and also at Geneva. It was characterised by a fever, followed by an aphthous eruption on the mouth and udders. Sheep and goats were likewise affected. In all cases the milk was altered in quality, and its use was said to transmit the malady to the human species.

1831. A fresh epidemic constitution may be said to be dated from this period. Preceded by influenza, the period was marked by Asiatic cholera, typhus fever, and scarlatina. Horses, dogs, and fowls were at the same time affected with pestilential diseases. Many horses in the neighbourhood of Chester were affected with dysentery, and so also were dogs.

1834. Puerperal fever, influenza and cholera prevailed. The sheep in Ireland suffered from rot, and large numbers of them died.

1836. A peculiar form of fever prevailed amongst pigs, attended with symptoms of inflammation of the bowels. The epidemic fever which prevailed among the people had also the peculiar character of extreme malignancy, was of an aggravated form, and was accompanied with dysentery.

1837. Since this period every Physician is well aware that a peculiar “epidemic constitution” has prevailed. It has been characterised by very marked and peculiar symptoms in many diseases. Not only have we been visited by diseases to which we had hitherto been strangers, but every known and familiar disease exhibited itself under an aspect of malignancy quite new to it. In addition to cholera and influenza; erysipelas, malignant scarlatina, and diffuse inflammation of the cellular tissue prevailed to a great extent. The inflammatory enteric epizootic amongst pigs continued to prevail, and the pleuro-pneumonia among cattle, which had spread itself so extensively over Europe for some time anterior to this date, now raged in Ireland for a succession of years, especially among the modern improved breeds of short-horned cattle, whose high feeding, thin hides, and comparatively delicate constitutions, rendered them less able to resist the ravages of disease than their more hardy, rough, thick-skinned predecessors. Sheep and horses likewise suffered. In 1841 we read that this cattle disease had travelled through Spain, Portugal, France, Switzerland, Holland, Belgium, Bohemia, Hungary, and Prussia, making its appearance in England in 1838, on the eastern coast, and in two years raged with violence on the west coast of Great Britain. There appeared to be confounded under the common name of “distemper” two distinct affections, namely, a primary and a secondary. The primary manifested itself chiefly on the surface, and was characterised by ulceration of the feet, lips, nose, and lining membrane of the mouth and tongue, with a constant slaverling or dribbling of frothy saliva. The secondary affection came on at various intervals after the primary, and the general symptoms were those of pulmonary visceral disease. The malady was of a highly contagious and inflammatory character, and affected chiefly the mucous tissue. Epidemic fever of a highly malignant type prevailed in many parts of Ireland and England at the same time.

1842. This year there was unusual distress in England. In Lancashire the people eat the flesh of animals which had died of various diseases. Diarrhoea, dysentery, and cholera prevailed in England.

It will thus be seen how frequently epidemics and epizootics occur together, forcing upon us the inference that both appear to be influenced by the existence of one and the same “epidemic constitution;” but that the elementary forms of disease which presented themselves were often unlike in man and animals.

ST. MARK'S HOSPITAL.—The Appointment of two Assistant Surgeons to this Hospital is expected. The Committee, it is understood, will support Mr. P. Gowland, and Mr. James Lanc. Mr. Ashton has entered upon an active canvass of the Governors.

BOOK NEWS.

SINCE the beginning of the month a number of journals, pamphlets, reprints, and new editions have accumulated on our table, and we are compelled to pass them over with a hasty notice.—The April number of the *British and Foreign* is rich as usual in Analytical and Critical Reviews.—The *Psychological* is particularly strong this quarter. The Degeneracy of the Human Race, Civilization and Insanity, and Marriages of Consanguinity—all most important questions—are very ably treated; and Dr. Webster's account of the Belgian Lunatic Asylums and the Insane Colony at Gheel, are of great interest.—The *Asylum Journal* has also some good original communications.—A new Quarterly has appeared, the *Quarterly Journal of Dental Science*. It contains editorial articles, communications on Dental Surgery and Mechanics, Hospital cases, Reviews, and Miscellaneous intelligence interesting to dentists.—Dr. Richardson has altered the title of his *Journal of Public Health*. It is now the *Sanitary Review*. An article in the last number on Medical Scientific Reform is worthy of notice, and not undeserving of criticism.—The October number of the *Indian Annals* has only just reached us. It contains one very noteworthy paper; the first of a series on Indian febrifuges by Mr. Cornish. It is a very praiseworthy attempt to increase our knowledge of the medicines used by the natives in the treatment of fevers. The Margosa, or Neem-tree Bark (*Melia Azadirachta* of Linnæus), is the subject of the first paper; and the results of 98 cases treated by cinchona or arsenic, and 134 by the margosa, tend to prove that it is quite as effective in the treatment of intermittents as either cinchona or arsenic.—The reprints before us are Dr. Fleming's paper on the *Measle of the Pig*, from the February number of the *Dublin Journal*; and Dr. Duncan's query, Is Ovariectomy Justifiable? from the *Edinburgh* of the same month. Both well-known papers.—Mr. Gamgee's inquiry into the *Reasons why the Horse rarely Vomits*, is a reprint from the *Veterinarian*, and will be read with interest by comparative pathologists.—Dr. Gurll's contributions to the *Statistics of Fractures and Dislocations* is reprinted from the *Deutscher Klinik*, and gives the results of five years' observation in the Berlin Hospitals. This is a valuable paper, giving the statistical particulars of 1631 fractures, 124 dislocations, and 24 combinations of fractures and dislocations. Additional interest is given by a comparison with other statistical accounts.—The *British Botanists' Field Book*, by Mr. Childs, is exactly what it pretends to be, a pocket-companion for the field botanist. It is a Synopsis of British Flowering Plants, prepared with extreme care, and worthy of general approval.—Mr. Parker, a dentist of Birmingham, has published a pamphlet on the performance of *Operations on the Teeth without Pain*. There is nothing new in his mode of applying the congealing mixture of Dr. Arnott, but he quotes many cases to show the utility of the application as an anæsthetic before extracting teeth or stumps, as a remedy for tooth-ache, and as a means of producing insensibility before stopping tender teeth.—The second edition of Mr. Hare's cases and observations illustrative of the beneficial results which may be obtained by close attention and perseverance in some of the most unpromising instances of *Spinal Deformity*, contains the account of a number of cases quite as remarkable as the woodcuts by which they are illustrated.—The *Speculum—its Moral Tendencies*, is the title of a pamphlet by a Fellow of the College of Surgeons, reiterating the threadbare objections to the abuse of this instrument.—Dr. Budgett has published a pamphlet on the *Tobacco Question*, considered morally, socially, and physically, according to the author, but we cannot discover that he has thrown any new light upon either of these divisions of the question.—Dr. Lankester's First Annual Report, as Medical Officer of health to the vestry of St. James's, contains a great deal of information on the parish during the past year, the sanitary condition of the houses, public building, and places, with remarks on offensive occupations and articles of food. It is impossible to over-estimate the importance of such reports as these forced year after year upon the attention of the parish authorities.—There are many useful practical remarks in Dr. Boyd's *Ninth Report of the Somerset County Pauper Lunatic Asylum*. A hat provided for the protection of the head of epileptics is worthy of general adoption. It is a common willow hat, with a broad brim turned over, and stuffed with horse-hair, so that, while the head is protected, it is not heated by a thick, heavy covering.—The chief point in Dr. Hood's report to the Governors of Bethlem Hospital is the necessity for improve-

ment in the regulations for the care of criminal lunatics, but Dr. Hood does not suggest any immediate change, as Government has now under consideration some new arrangement for the maintenance and care of criminal patients in all lunatic asylums.—The two lectures by Dr. Laycock, on the *Social and Political Relations of Drunkenness*, which caused so much excitement lately at Edinburgh, have been published in a cheap form; and if there be any possible manner in which a sixpence can be spent better than in the purchase of a number of the *Medical Times and Gazette*, it is by exchanging the pretty little coin for these two very able lectures.—The Statistical Society appointed a Committee on Beneficent Institutions some time ago, who have just brought out a report on the *Medical Charities of the Metropolis*. It contains a great deal of curious information, some of which will be found in our columns hereafter.

GENERAL CORRESPONDENCE.

PERINEAL SUTURE.

[To the Editor of the Medical Times and Gazette.]

Sir,—As my name, I perceive, has been, I think unnecessarily, introduced by Mr. Brown into his communication to your journal of last week, I must beg the favour of space enough in your next impression for the following remarks:—

The question is—"A Plastic Operation for the Cure of Lacerated Perinæum and Prolapsuses per Vaginam."

Mr. Brown says,—1. "He was the first English surgeon who performed it, and brought it under the notice of the profession."

This is a very great error. On the 6th November, 1838, Mr. Davidson did this operation, anticipating Mr. Brown, even to minute shades of subsequent treatment. There are other cases, but I mention this, as it is given in full in Dr. Churchill's "Diseases of Women," in the very page from which Mr. Brown quotes "Noel" in his work. Mr. Brown's first operation was in August, 1851.

2. "When he (Mr. Brown) first performed it 'many years ago' (1851!!), he did not know any other person in the world had done it."

Fricke's first operation was on March 3rd, 1832, and succeeded perfectly. The patient subsequently married. If in 1854, the date of Mr. Brown's work, Mr. Brown had never heard of Fricke's name, whose operations moreover are mentioned in Dr. Churchill's work, quoted by Mr. Brown, then what could induce him to pretend giving a "Surgical History of the Subject?" (*vide* Brown's work, p. 12.) To ignore the name of Fricke in connexion with this branch of surgery, is like ignoring the names of Brodie and Fergusson in connexion with British surgery in general.

3. "After he had brought out his work, Mr. Brown says, he learnt that Dr. Fricke, of Hamburg, had performed one of a similar character, and subsequently Dr. Savage informed him it had been done more effectually by Dr. Geddes. He previously knew nothing of these two."

Dr. Geddings has recorded four cases at least. All succeeded perfectly. His method is, as I told Mr. Brown, the most effectual one I ever heard of. Dr. Geddings' first case* was on July 8, 1839, twelve years before Mr. Brown's first operation.

4. "His (Mr. Brown's) first operation has been performed and recognised, among others, by Dr. Savage himself."

Mr. Brown is simply in complete error here as regards myself.

5. "Few cases require so complete a closure of the vagina as appears to have been done in the two operated on by Mr. Fergusson, as it renders impossible impregnation or delivery, whereas after his (Mr. Brown's) plan both can take place without detriment."

If possible, this is a statement more unbecomingly incorrect than any of the rest Mr. Brown has betrayed himself into in support of his claims. Mr. Fergusson's cases are doing well in every respect. I have had seventeen cases, most of which have long been well, and entirely free from those sexual disabilities Mr. Brown mentions.

(a) Quoted in Braithwaite's Retrospect, vol. iii. art. 39; fully in American Journal of Medical Sciences.

Mr. Brown's insinuations against Mr. Fergusson's surgery in these matters, in contrast with his own, require no special comment from me. I am, &c.

HENRY SAVAGE, M.D., Lond., F.R.C.S.,
Physician to the Samaritan Free Hospital for Women.
7, Gloster-place, Portman-square, April 10, 1857.

PRETUBERCULAR STATE OF PHTHISIS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I find that Dr. E. Smith is very angry with me, for venturing to state at the Pathological Society that I had met with a case of tubercular disease of the lungs, which, in my opinion, demonstrated the hypothetical nature of the views of those who speak of pretubercular stages of phthisis.

The case seems to puzzle Dr. E. Smith, and he cannot explain it so as to make it fit his own opinions. In this dilemma, he does what many a good man has wisely done before him, he drops the case, and applies himself to the author of it. "There is something wrong here," he says, "your wits were wool-gathering when you stated this, or really your powers of diagnosis seem indifferently good; I beg to suggest that the whole thing is a mistake."

Now I was ready for this sort of *tu quoque*, and I therefore anticipated any thrusts at my own feebleness, by placing myself behind the skirts of authority. I quoted Skoda, and might have quoted Louis also, to show that what I illustrated in the case had been declared true by them; viz., "that solitary tubercles do not of themselves produce the slightest alteration in the percussion sound."

My main reason, however, for this hasty note was to ask you to put me right at once with your readers; for Dr. E. Smith has, some way or other, by the aid of inverted commas, thrice in one half column, put into my mouth a most ridiculous *bêtise*; he may well say, he can't understand the meaning of "miliary tubercles scattered through every tube of each lung." I don't know where he picked up the phrase; all I know is, that it never came out of my mouth or inkstand. If he will turn to my own report of the case in the British Medical Journal, he will find, I trust, that among my many failings, I have not yet tumbled into such loose and illogical phraseology as such an expression would imply.

Perhaps you may another time find me a corner to say a word on Dr. E. Smith's pretubercular views; for I fancy, despite Dr. E. Smith's epistolary *coup-de-maitre* style, I may convince some of your readers, that I am reasonably justified in objecting to the theory of a pretubercular stage, and to something else besides, viz., the practice founded on the theory. I am, &c.

Clarges-street, April 14, 1857. W. O. MARKHAM.

RESULTS OF AMPUTATION AT THE ANKLE-JOINT.

[To the Editor of the Medical Times and Gazette.]

SIR,—I would not presume to offer any remarks upon the question recently mooted in the pages of the *Medical Times and Gazette*, as to the propriety of amputation at the ankle-joint, did I not feel that my experience in the adaptation of such mechanical appliances as are necessitated by this form of operation, being considerable, afforded an apology for what would otherwise be an act of great obtrusiveness.

During several years I have had frequent opportunities of testing the mechanical value of long stumps, and have arrived at the conclusion, that, with the exception of one or two instances, their advantage is not so great as to compensate for the extra trouble they occasion in constructing artificial legs suitable to their peculiar condition. If this objection rested merely upon the additional ingenuity required to overcome any mechanical difficulty created, it would matter little; but I have always found that, however well-formed the stumps are, they rarely sustain for any length of time pressure applied to their inferior surface, unless it be in the shape of a padded circular boot. When an attempt is made to attach an artificial foot, resembling in artistic proportion the natural one, I have almost invariably discovered that the utmost pains must be taken to prevent anterior pressure at the lower extremity.

Long stumps are also usually larger at their inferior surface

than at the ankle, thus preventing an ordinary cylindrical leg-sheaf from being applied; hence I have generally been compelled to adapt a kind of trough, fastening in the front, to secure retention of the leg in its perpendicular axis, and enable the action of the artificial ankle-joint and foot to take place without producing abrasion against the anterior end of the stump. Even with this precaution, if the weight of the patient be not partially sustained by the leg-sheath, injury to the stump frequently ensues. The advocates for long stumps occasionally cite the additional leverage acquired, but this is hardly needed to bring into action so slight a resistance as that offered by the weight of an artificial leg. In my opinion the best stump for the attachment of an artificial leg below the knee is when amputation has taken place at the middle of the second third of the tibia, as it leaves sufficient space below for all the necessary mechanism required for simulating the natural action of the joint, and yet affords quite leverage enough for the movement of the limb during progression.

As, however, I feel the delicacy of venturing to suggest any particular point for operation, I prefer subjecting my opinion to that of the medical profession, merely stating that I have always found the situation I have mentioned result in greater success, when an artificial leg was applied, than any other.

To return to amputation at the ankle-joint, if I am rightly informed, the usual operations are Chopart, Syme, and Pirogoff; the first of which, I believe, consists in a removal of the anterior portion of the foot, leaving the astragalus and calcis for the patient to rest upon; the second involves the excision also of the calcis and astragalus, the weight of the body being borne by the ends of the tibia and fibula; and the third suffers a portion of the calcis to remain, as a kind of pin for the patient to bear on. In all these the difficulty I have stated presents itself, viz., the necessity for preventing abrasion by taking a partial bearing of the body against the knee and lower leg, instead of depending entirely upon the end of the stump, as is evidently intended by the operation. In some exceptional cases a fair amount of resistance can be taken at the end of the stump, and in these, I am bound to admit, the only objection I find is, that, notwithstanding the mechanical advantage of a closer approximation with the ground than the usual amputation could give, and, consequently, an exercise of greater leverage, the artificial leg, which can alone be applied, presents a far less real appearance than those constructed for higher operations, as it is obliged to consist of a calf sheath, and two lateral steel stems jointed at the ankle, and a foot furnished with toe-joint.

Now, as the end of the stump after Chopart's operation (and it is principally these that take the best bearing on the end) is rendered large, any lateral application must be still larger, and a clumsiness not at all consistent with the character of the natural limb, be imparted to the wearer's foot. This, if it be a man, does not very greatly signify, as the trowsers hide it, but in a female the appearance becomes very objectionable; and I have often found patients admit that, although they could stand and walk well, yet they would have preferred the usual amputation, followed by a more artistically-formed artificial leg. Your readers may probably consider this is merely a question in which ingenuity and practical experience will lead to better and more perfect forms of artificial feet being adapted.

I do not entertain the same idea on this point, as there are certain conditions which must always oppose anything like beauty of shape in such appliances—viz., breadth of ankle, and necessity for avoiding pressure against the anterior surface of the stump.

I append the following cases as illustrating the application of mechanism to the stumps resulting from amputation at the tibio-tarsal articulation.

Private H.—Amputation of both legs—Syme's operation. Two artificial feet were adjusted, the weight of the body being taken around the knee, consequent upon the ends of stumps being pained by any pressure exercised against them.

Private C.—Amputation of both legs; one at the ankle-joint (Syme), the other about the second third. Artificial legs applied, and apparatus for taking the bearing around the knee, as the patient could not bear pressure against end of stump.

Corporal M.—One leg amputated—Syme's operation. Apparatus applied taking pressure partly at end of stump, also around the leg. Patient walked without difficulty, but in-

finitely better when the leg part was tightly applied than when the whole weight was suffered to rest on end of stump.

Mr. C.—One leg amputated—Syme. Had walked for some time on a leathern hood, but complained of frequent abrasion of stump. Apparatus taking bearing around leg applied, and patient walked well.

Miss Anne S.—One leg amputated—Syme. Could not bear the least pressure at end of stump, but walked perfectly when bearing was taken around leg.

Miss Harriet B.—One leg amputated—Syme. Had used a padded boot, and could walk with it very well; but on attempting to use an artificial foot, found pain at end of stump, until relieved by the bearing being taken round leg.

Private W. Y.—Both legs amputated; one by Syme's operation, the other about upper third. Could not bear the least pressure against the anterior part of the stump, but walked comfortably when the pressure was transferred to the leg.

Mr. McL.—One leg amputated—Chopart. Could walk readily on end of stump, had done so for some time, on an ordinary boot well padded, but found the front of stump exceedingly sensitive when the padding was not immediately under the heel;—contraction of tendo achilles, tending to throw the front of the stump downwards. Artificial foot adjusted, taking the bearing around leg and partly against the heel. The patient walked perfectly, but if the leg sheath became accidentally loosened, complained of pressure at front of stump.

Mr. S.—One leg amputated—Chopart. Can walk on heel without difficulty, but had never been able to obtain an artificial foot he could wear without pain. Bearing taken around leg, and he walked well on a properly adjusted artificial foot.

These cases are taken indiscriminately, all having been under mechanical treatment within the last eighteen months.

I shall feel exceedingly obliged by your kindly affording these observations space in your valuable journal.

I am, &c.

HENRY HEATHER BIGG.

29, Leicester-square.

THE CHARACTERS AND EFFECTS OF DISEASED MEAT.

THE Imperial Central Society of Veterinary Medicine of France, with a view of throwing light upon a very important question of public health, proposed the following subjects for a Prize Essay:—

1. Is it possible to ascertain by the examination of butchers' meat whether the animals that furnished it were in perfect health? 2. Are there any special and precise signs which enable us to determine whether butcher's meat (the animal being still entire, divided into quarters, or cut up) has been prepared from healthy animals, the flesh having become changed by atmospheric or other influences; or from animals that have died, or have been slaughtered in consequence of fatigue, accident, the absence of proper care, deficiency of food, etc.? Is such meat to be considered wholesome or unwholesome; and, in the latter case, what are the inconveniences which result to man from its temporary or permanent consumption? 3. Can we determine by the inspection of the entire or divided animal in slaughter-houses or butchers' shops whether it has died or been slaughtered, having been for a greater or less period of time the subject of diseases such as carbuncular disease (*charbon*), peripneumonia, *cocotte* phthisis, small-pox (*clavelée*), measles, rot (*cachexie aqueuse*), etc.? If so, point out the signs by which the traces of these diseases may be recognised. 4. State, basing your opinion as far as possible upon facts besides those already known, whether food prepared from such flesh should be allowed to be consumed, or whether it should be confiscated and destroyed.

A prize of 1000 francs was offered, but only one essay, that of M. Soumille, of Avignon, was sent in, and for this a gold medal, 200 francs in value, was decreed. The essential points of the essay are indicated in the following extracts from M. Reynal's report upon it:—

1. M. Soumille believes it is impossible to determine whether an animal is perfectly healthy, except when it is seen entire or divided into quarters. He makes an exception in

favour of general diseases which attack the entire organism, as measles, small-pox (*clavelée*), phthisis, and carbuncular disease, which he terms gangrenous splenitis.

2. During rains and mists, meat suffering from atmospheric influences remains soft. It dries with difficulty, and that which is situated beneath fleshy surfaces never dries. It is of a pale colour, and easily retains the impression of the finger. It is easily spoilt, and acquires a putrid smell which keeps constantly increasing. The author has seen meat become black in less than two days after its preparation. When cooked, it is soft, and destitute of all flavour. In stormy weather the southerly winds exert a pernicious effect upon the flesh of young lambs and calves. That of sheep and oxen resists better, but furnishes a less rich broth and much less nutritious fibre than at other periods. During severe cold in winter, meat sometimes freezes, and acquires great rigidity. When cut, at the surface of the section droplets of coloured fluid may be seen oozing out at the end of each divided fibre. It resists cooking, and continues to yield water. It is tasteless and indigestible, and should not be employed as food. During the great heats of summer meat becomes quickly blackened and spoilt, decomposition taking place more or less rapidly.

3. The inspection of the entire animal at the slaughter-house, where the viscera can be examined, alone allows of our determining whether it was the subject of carbuncular disease (*charbon*), peripneumonia, or phthisis, at its death. If quartered or cut up, no proof of this can be obtained. Sheep suffering from the small-pox (*clavelée*), seen in the carcase, exhibit an infiltration of the external cellular tissue, which is also pierced by small apertures. Mutton, coming from sheep the subjects of rot (*cachexie aqueuse*), is infiltrated with serosity, flaccid, and deficient in colour. In regard to the measles (*ladrerie*) of pork, it may be always easily detected, whether the animal has been cut up or not. Small whitish granulations, which contain the vesicular worm, are observed at the cut surface, and especially in the lean portion of the meat. When such meat is exposed to the action of fire a crackling is heard, due to the rupture of the measley vesicle. Supported by a great number of observations made upon animals suffering from this disease, M. Soumille opposes the general opinion that the pork they furnish is pale, and that the bacon is yellow, and without consistence. Beyond the presence of the vesicle, he maintains that this measley meat presents no difference whatever in colour, smell, or consistence. He also denies the unwholesome properties so generally attributed to measley pork, and believes it to be just as wholesome and agreeable, when eaten fresh, as is non-measley pork; and in proof of this he refers to many experiments made upon himself and his family. He admits, however, that this pork does not salt well; there is great loss, and it does not, when salted, keep so long. Moreover, sausages made of this pork dry with difficulty, and keep for less time, soon becoming black and rancid if not kept in a dry place. M. Reynal calls attention to the importance of this point being further investigated, as, if the author's observation becomes verified, the present great loss to both producer and consumer, by the destruction of measley pork, may be prevented.

4. The manipulation of the flesh of diseased animals is rarely, in M. Soumille's opinion, followed by ill consequences, unless wounds, excoriations, etc., be present. He observes that butcher's lads, catgut makers, tripe dressers, &c., generally enjoy an excellent state of health. The consumption of these meats may be permitted without inconvenience, and the author would only prevent the sale of such as proceeded from animals in whom emaciation coincided with disease, advanced age, and paleness of the fleshy fibre. He would also proscribe, although convinced of its harmlessness, the use of meat furnished by fatigued animals, or by those which have not sufficiently bled at the slaughter-house, by reason of its tendency to rapid decomposition.

The signs which indicate that an animal has died naturally are, according to M. Soumille, when the entire animal is examined, lesions of certain viscera, coagulation of blood in the vessels, hypostases in the great splanchnic cavities, and injections or arborisations of the cellular tissue. When cut up, the meat is red, and blood flows from it when it is divided. Its surface is part-coloured, red, white, blue and yellow being mingled together. In animals that have been slaughtered in consequence of their fatigue, or of the bad care that

has been taken of them, the characters, with less intensity, much resemble those indicated above. M. Soumille especially insists upon the injection of the muscular substance; but he does not think that when the animal has been cut up that any real difference can be established between the flesh of an animal which has been slaughtered on account of fatigue, and of one that has died a natural death. The former may be eaten, but M. Soumille recommends that the latter should be rejected, although he does not believe that it is capable of giving rise to ill consequences. Upon this point he has instituted experiments upon animals, the results of which are confirmatory of the conclusion arrived at by M. Renault, viz. the harmlessness of such meat.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS.—At the usual Quarterly meeting of the Comitia Majora, held on Monday, April 6th; after having passed the necessary examinations,

Dr. FREDERICK COEK, Westbourne Park-terrace, was admitted a member of the College.—At the same time,

Dr. ROOTS,
Dr. FERGUSON,
Dr. ARTHUR FARRE,
Dr. SIR JOHN FORBES, and
Dr. CURSHAM,

were elected Consilarii.

ROYAL COLLEGE OF SURGEONS.—At a meeting of the Council on the 8th inst. the Jacksonian Prize was awarded to Mr. VICTOR DE MERIC, of Brook-street, Grosvenor-square. And at the same meeting the following gentlemen were admitted Fellows of the College:—

ANDERTON, HENRY, Much Wootton.
BERNARD, RALPH MONTAGUE, Clifton.
BESEMERES, WILLIAM, Old Kent-road.
BROWN, ROBERT, Brixton-hill.
BYERLY, ISAAC, Seacombe, Cheshire.
CLIFTON, NATHANIEL HENRY, Islington.
CROFT, CHARLES ILBERTON, Laurence Pountney-hill.
ELLIOTT, ROBERT, Chichester.
EVANS, RICHARD DAVID JONES, Hertford.
EWEN, HENRY, Long Sutton.
FAWSETT, FREDERICK, Wisbeach.
FENTON, JOHN, Liverpool.
HARRISON, ISAAC, Reading.
HILLS, GEORGE, Keighley, Yorkshire.
IBBETSON, GEORGE AUGUSTUS, Brook-street, Hanover-sq.
KINGSFORD, EDWARD, Sunbury.
LISTER, JOHN, Doncaster.
MINTER, JOHN MOOLENBURGH, Her Majesty's yacht Victoria and Albert.
NICHOLSON, JOHN FREDERICK, Stratford-green.
NOURSE, WILLIAM EDWARD CHARLES, West Cowes.
ROBERTS, WATKIN WILLIAM, Carnarvon.
SCOTT, EDWARD JOHN, Portland-lodge, Southsea.
STRATHER, ARTHUR, Darlington.

At the same meeting of the Council

DREYER, JOHN, Birmingham,
MACMINKAN, JOHN, Stratford,

were admitted, *ad eundem*, Members of the College.

The following gentlemen were admitted members on the 13th inst.:—

ALEOCK, J., Cobridge, Staffordshire.
BANNISTER, A. J., Chelsea.
BARFORD, J. G., Wokingham, Berks.
BROCK, E., Canterbury.
CHAPPELL, J. J., Axmouth, Devon.
HODGES, W., Brecon, South Wales.
MARRIOTT, C. W., Leamington.
RAMSBOTHAM, W. B., Claremont-square.
RENTSCH, G. H., Hampstead.
RICHARDSON, F. H., Highgate.

Also, on April 15:—

BAKER, WILLIAM LANGWORTHY, Newton Abbot, Devon.
BLACKALL, JOHN GEORGE, Hoxton.
DAVY, FRANCIS J., Knighton, Devon.
DENNE, THOMAS, Sittingbourne, Kent.
EVANS, ABEL, Llanyssil, Cardiganshire.

GIRDLESTONE, WILLIAM THEOPHILUS, Wordsley, Staffordshire.

HAMILTON, WILLIAM, Tarbert, Ireland.

HETHERINGTON, JOSEPH, Lamplugh-hall, Cumberland.

JOHNSON, OSBORNE, Bassingham, Newark, Notts.

JONES, WILLIAM PODMORE, Marlboro'-place, Old Kent-road.

KNAGGS, HENRY, Huddersfield.

MUDD, WILLIAM, Hadleigh, Suffolk.

NOBLE, WILLIAM, Linton, Herefordshire.

THOMAS, JOHN, Cardigan.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, April 9th, 1857.

COCKEROTT, GEORGE EDMUNDSON, Middleham, Yorks.

EDWARDS, HENRY JOHN, Bampton, Devon.

GRANGER, WILLIAM SLOCOMBE, Bradford Abbots, near Sherborne.

HERBERT, JAMES, Merthyr Tydfil.

LEWIS, ROBERT BENSON, Bradford, Yorks.

MASTERS, JOHN, Jun., Ilminster.

ROBSON, FREDERICK ABERCROMBIE HOSSE, Peninsular and Oriental Company's Service.

SKAIFE, HENRY, Easingwold, Yorks.

THOMPSON, WILLIAM WITTMAN, Bognor, Sussex.

WOODHOUSE, THOMAS JAMES.

MARISCHAL COLLEGE AND UNIVERSITY, ABERDEEN.—At the late Examination Term, the Degree of M.D. was conferred on the following gentlemen:—

AVELING, JAMES HOBSON, Sheffield.

BOWDEN, STEPHEN, R.N.

BURNESS, JOHN, Forfarshire.

CARNY, JOHN, Hon. E.I.C.S.

COLLIE, JAMES, Aberdeenshire.

COURTNEY, SYDNEY CHARLES, Surry.

FARQUHAR, WILLIAM, R.N.

HENDERSON, WILLIAM, Clifton, Bristol.

PEET, JOHN, Professor of Surgery and Principal, Grant Medical College, Bombay.

SMITH, JOHN WOODMAN, Ross-shire.

And the Degree of M.B. on the following:—

ANDERSON, JOHN, Aberdeen.

CHEVES, ALEXANDER BRUCE, Aberdeenshire.

LAING, JAMES, Aberdeen.

KING, ALFRED, London.

PIRRIE, WILLIAM, Aberdeen.

WALES, GEORGE FREDERICK, Belfast.

DEATHS.

DR. JEAN DE CARRO on March 12, at Karlsbad. He was the Nestor of the Austrian Mineral-Water Practitioners (Badeärzte), having reached his 87th year.

EVEREST.—On the 2d inst., at 4, Leighton-terrace, Kentish-town, Charles Evreux Everest, late Surgeon to the H. E. I. C.'s Bengal Army, and Surgeon to the Residency at Nepaul.

HEWITSON.—On the 15th March, at Redhill, Dr. B. W. Hewitson, F.R.C.S., Deputy Inspector-General of Hospitals, aged 69.

SAYLE.—April 7th, aged 35 years, George Sayle, Esq., M.R.C.S., L.L.A.C., 1843, from laryngitis, 5 days. He had been in a precarious state of health with bronchitis for some time, but his lately improved condition and aptitude for exertion led his friends and himself to believe that he might eventually recover. He was surgeon to the West Norfolk and Lynn Hospital; coroner for the West Norfolk district, and one of the town council of the borough. He was an ardent sanitary reformer, but a warm conservative in politics, and took much interest in public business, in which he showed considerable ability; and though somewhat given to egotize and occasionally warm and abrupt, he was a ready orator, and his firmness, fearlessness, and independence gained him many friends and admirers, as was shown by his invariable return by large majorities when opposed in the Middle Ward, which he represented for upwards of eight years. His untimely death creates three local vacancies. That of the hospital will probably be filled by the election of Dr. Cotton, who has been warmly solicited by the managing authorities of the institution to resume his former position of senior surgeon.

SEDGWICK.—On the 2d inst., at Boroughbridge, Yorkshire, Roger Sedgwick, Esq., M.R.C.S.G., L.M., and L.S.A. 1856, aged 65.

SMYTH.—On the 2nd instant, at a quarter to 4 in the afternoon, at his residence, 59, Vauxhall-walk, aged 63, Dr. William Gray Smyth, M.D., Glasgow, 1828, who has practised in Lambeth upwards of 25 years. His skill and kindness will be long remembered and missed by his patients.

SMYTH.—On the same day *and time*, at the residence of his brother, 10, Rochester-terrace, Vauxhall Bridge-road, of consumption, aged 19, Charles Doveton Smyth, Esq., student of medicine, son of the above-named Dr. William Gray Smyth, M.D.

SKELTON.—April 8th, at Abbey-road, St. John's-wood, Joseph Skelton, M.D., Battalion Surgeon, Coldstream Guards, in the 44th year of his age. Dr. Skelton embarked from England with his regiment for the seat of war in February, 1854; and, after serving at Varna during the following summer, where his regiment suffered severely from privation and disease, he re-embarked with his regiment on the Crimean expedition. He was present at the battle of the Alma, during the greater part of which he was under fire. His arduous exertions on that occasion, combined with the fatigue which he experienced on the subsequent march of the British army from Old Fort to Balaklava, led to an attack of hæmoptysis; but, on the emergency which arose at the battle of Balaklava, he was suddenly called upon to leave his bed, and resume his duty in the field. His health then entirely broke down, and having been invalided, he left the Crimea for England two days after the battle of Inkermann. Shortly after his return to England, Dr. Skelton had the honour to be included among those officers of the Guards who received from Her Majesty the medal for distinguished conduct in the field. Before his health was sufficiently re-established, he returned to the Crimea in September, 1855, and served with his regiment during the rest of the campaign. His health, however, had been thoroughly shattered by the Crimean hardships, and a short time after his return to England another attack of hæmoptysis led to his premature decease. Very few medical officers in the army have been more generally respected and esteemed, not only by his medical confrères, but by all those with whom he served.

TESTIMONIAL.

PRESENTATION OF A TESTIMONIAL TO DR. REED, OF HERTFORD.—A subscription having been set on foot for the purpose of presenting a testimonial to Dr. F. G. Reed, late of Hertford, in recognition of the valuable services he has rendered for many years past as one of the Medical officers of the General Infirmary at Hertford, Thursday last was appointed for the presentation, which took place in the Board Room, at the Infirmary. The testimonial, a handsome épergne, is beautifully executed in silver. The inscription is as follows:—"Presented to F. G. Reed, Esq., M.D. by the Governors and friends of the General Infirmary at Hertford, in token of their gratitude for his valuable Professional services during many years as one of the Honorary Medical officers of the Institution. April, 1857."

ROYAL VETERINARY COLLEGE.—The Students of the above Institution met in the Theatre thereof on Thursday evening, the 9th inst., and presented to their Professor of Chemistry and Materia Medica, Mr. Morton, the usual appendages to a silver tea and coffee service, which had been given him previously.

ROYAL SOCIETY.—The offices of the Society have been removed from Somerset House to Burlington House.

WESTMINSTER HOSPITAL.—Dr. J. Russell Reynolds succeeds to the vacant office of Assistant Physician without opposition.

The late Captain **GEORGE HALL**, R.N., of Clive Cottage, Alnwick, has left £500 to the Alnwick Infirmary.

DR. ARMSTRONG, R.N., had the honour of an interview with His Royal Highness Prince Albert, at Buckingham Palace, on the 11th inst., and presented a copy of his Narrative of the Discovery of the North-West Passage.

ACADEMIE DE MEDECINE.—After a sharp contest with M. Tardieu, M. Devergie has been chosen a member of the Section for Public Hygiene and Legal Medicine.

THE following are the number of Deaths from Small-pox, Measles, Searlatina, Hooping-cough, Diarrhœa, and Typhus, in the several Districts of London, for the past Week:—

	Popula- tion.	Small- pox.	Measles.	Scar- latina	Hoop- ing- Cough.	Dia- rrhœa.	Ty- phus
West.....	376,427	..	..	1	7	1	2
North	490,396	2	3	4	16	2	20
Central ..	393,256	1	9	4	10	3	10
East.....	485,522	..	3	9	2	2	8
South	616,635	..	2	5	15	2	10
Total..	2,362,236	3	17	23	50	10	50

DEATHS REGISTERED in the Metropolis for the Week ending Saturday, April 11, 1857.

CAUSES OF DEATH.	In the Week ending Saturday, April. 11, 1857.						Averages of Temperature and Deaths in 10 Weeks.
	Deaths of Persons.						
	AT ALL AGES.	Mean temp.	Under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.		At 80 Years of Age and Upwards.
Mean Temperature	49.9						45.6
ALL CAUSES	1059	529	138	168	172	47	1102.9
SPECIFIED CAUSES	1054	529	138	168	172	47	1098.8
DISEASES:—							
1. Zymotic Class	181	143	13	11	12	2	223.7
2. Dropsy, Cancer, and others of uncertain seat ..	39	5	6	14	13	1	47.0
3. Tubercular Class	199	77	68	44	9	1	204.6
4. Of Brain, Nerves, etc. ..	138	73	7	21	32	5	131.7
5. Of Heart, etc.	35	..	8	12	13	2	42.5
6. Of Respiratory Organs ..	222	128	9	32	42	11	219.5
7. Of Digestive Organs ..	79	32	10	22	11	4	60.0
8. Of Kidneys, etc.	18	1	5	5	6	1	13.1
9. Of Uterus; viz.—Puer- peral Disease, etc.	3	..	2	1	..	..	8.6
10. Of Joints, Bones; viz.— Rheumatism, etc.	5	..	1	3	1	..	7.9
11. Of Skin, etc.	2	..	1	..	1	..	2.2
12. Malformations	3	3	..	..	..	..	3.4
13. Debility from Premature Birth, etc.	34	31	..	..	..	..	27.7
14. Atrophy	31	20	1	2	8	..	27.7
15. Age	37	..	..	..	18	19	48.8
16. Sudden	5	3	1	..	1	..	6.1
17. Violence, Privation, etc. ..	23	10	6	1	5	1	24.3
CAUSES NOT SPECIFIED..	5	..	..	..	..	..	5.1

BOOKS RECEIVED.

- Des Anévrysmes et de leur traitement. Par Paul Brœca. Paris. 1856.
 On Operations on the Teeth without Pain. By S. A. Parker. Birmingham. 1857.
 The British Botanist's Field Book. By A. P. Childs, F.R.C.S. London. 1857.
 Ninth Report of the Somerset County Lunatic Asylum. Wells. 1857.
 Bethlem Hospital. Report for 1856.
 The Hygienic Treatment of Pulmonary Consumption. By B. W. Richardson, M.D. London. 1857.
 The Social and Political Relations of Drunkenness. By T. Laycock, M.D. Edinburgh. 1857.
 Is Ovariectomy Justifiable? By J. M. Duncan, M.D. Edinburgh. 1857.
 Report of the Statistical Society on Medical Charities. London. 1857.
 On the Measle of the Pig. By A. Fleming, M.D. Dublin. 1856.
 The Tobacco Question. By J. B. Budgett, M.D. London. 1857.
 A Personal Narrative of the Diseases of the North-west Passage. By A. Armstrong, M.D., R.N. London. 1857.
 How to Farm Profitably. By Mr. Sheriff Mechi. London. 1857.
 Statistics of Insanity. By W. C. Hood, M.D. London. 1857.
 On the Diseases, Injuries, and Malformations of the Rectum and Anus. By T. J. Ashton. Second Edition. London. 1857.
 A Treatise on Venereal Diseases. By D. Morgan, M.R.C.S. London. 1857.
 La Santé Universelle. Vols. I. to V. Paris. 1852—56.
 A Few Words on Hemœopathy. By W. T. Gairdner, M.D. Edinburgh. 1857.
 Transactions of the Medical and Physical Society of Bombay. Bombay. 1857.
 On the Diseases of Women. Fourth Edition. By F. Churchill, M.D. Dublin. 1857.
 Vocal Gymnastics. By G. F. Uring. London. 1857.

- The Management of the Sick Room. By R. H. Bakewell, M.D. London. 1857.
- On the Nature, Cause, and Cure of Asthma. By J. Rumball, M.R.C.S. London. 1857.
- New Government Offices. Observations on the Designs. London. 1857.
- On Stricture of the Urethra. By Henry Smith, F.R.C.S. London. 1857.
- Medical Examinations and Physicians' Requirements. By Thomas Mayo, M.D., F.R.S. London. 1857.

TO CORRESPONDENTS.

Mr. King.—We have not been able to find the exact formula for the *Spiritus Saponatus* used by Dr. Lintner. This preparation in Cesterlen's *Materia Medica* is said to be a solution of Spanish soap in spirits of wine and rose-water, alone or in combination with camphor. Jourdain gives a formula in the *Pharmacopie Universelle* which would probably do very well. It is as follows:—Soap, 3 ounces; carbonate of potass, 1 drachm; alcohol, 12 ounces. Filter.

THE NEW MEDICAL M.P.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I have seen a paragraph in the last number of your journal to which I desire to call your attention. It makes reference to Medical M.P.'s, and states that John Boyd, M.D., has been returned for this borough. There is some truth in this, but a slight error. The truth is that John Boyd has been returned as our representative; the error is that the same John Boyd is not an M.D., and does not possess, so far as I can ascertain, any legal qualification. He is indeed commonly known as Dr. Boyd, from having been at one time apprenticed to the Medical Profession, but I believe my statement is quite true that he is not possessed of any Medical qualification. I regret that I have thus to add another humiliating fact in reference to the non-representation of our Profession in Parliament, but let me hope that statements of this kind will have the effect of arousing Medical men to the necessity which exists for freeing a learned Professor from such an anomalous position. It is nevertheless but justice to Mr. Boyd to state, that when in Parliament his influence, which was very great, was always thrown into the scale of justice and progress when the interests of science and of the profession of medicine were endangered, and I have no doubt that now he will pursue the same honourable course. I am, &c. MEDICOTOMIST.

Coleraine, April 6, 1857.

M.R.C.S. and L.A.C., writing from the provinces, complains—and with great justice—of the dangerous facility allowed to the sale of poisons in his district. He states that he was called one morning to see a girl who had taken *one ounce* of laudanum, which she had procured from a small shopkeeper, a retailer of drugs and groceries in the same village where she lived. The poison was sold without any hesitation, nor were any questions asked as to the use the girl intended to make of it. As long as the Legislature exhibits such culpable laxity in permitting the unrestricted sale of dangerous drugs, we cannot be surprised if murder and suicide are so common among us at the present day.

TREATMENT OF THE APPARENTLY DROWNED.

The following are the New Rules, or the "Ready Method" of Dr. Marshall Hall, for the treatment of suspended animation in drowned persons:—Lose not a moment of time; treat the patient on the spot in the open air, exposing the face and chest freely to the breeze, except in cold weather; then—

I. To Excite Respiration.

Place the patient gently, and for a moment, on the face, to allow any fluids to flow out of the mouth. Then raise the patient into the sitting posture, and endeavour to excite respiration:—1. By irritating the nostrils by snuff, hartshorn, etc. 2. By irritating the fauces by a feather, etc. 3. By dashing hot and cold water alternately on the face and chest. If these means fail—

II. To Imitate Respiration.

Replace the patient on his face, his arms under his forehead, and—1. Turn the body gradually, but completely on the side, and a little more, and then again on the face, alternately. 2. When replaced, apply pressure along the back and ribs, and then remove it, and proceed as before. 3. Let these measures be repeated gently, deliberately, but efficiently and perseveringly, sixteen times in a minute only.

III. Continuing these measures, rub all the limbs upwards, making firm pressure, energetically. Replace the wet clothes by such other covering, etc., as can be procured. Omit the warm-bath until respiration be re-established.

DIMINISHING POPULATION OF FRANCE.

A Correspondent, commenting on our remarks in a late number on the French census, says:—"The French are beginning to prevent, as much as possible, a rapid increase of population, by having few children to a marriage. In France, it is now considered by the majority as the height of imprudence for a married couple to have more than two, or, at the most, three children; and what is the consequence? Lord Shaftesbury and Sir Francis Head, on visiting the poorest districts in Paris, were unable to discover anything approaching to the squalor and misery in any of our large towns, such as London, Manchester, and Glasgow. The artisans, also, were not nearly so hardly worked as those in London. There is no doubt that married persons pay attention to the period of the possible impregnation of the ovum in the female, and thus, and by other means escape the horrors of a starving family and overwork, so common in this country."

M.D.—It would be too great a compliment to the writers to notice any of the nonsense printed in the Journal of Homœopathy.

Mr. Garner's cases shall appear immediately.

Chirurgicus.—The subject of Sir Ashby Cooper's Prize, to be adjudged in 1859, is the Structure and Use of the Myroid Gland. The College of Surgeons' Triennial Prize of 50 Guineas is the Structure and Functions of the Lymphatic and Lacteal Systems; and there are three Jacksonian Prizes to be contended for,—1. Gunshot Wounds and their Treatment. 2. The effects produced by the introduction of Poisons from the Lower Animals, and 3. Vegetable Poisons, their Effects and Detection. These are not the full titles, but any one can get them and all particulars at the College by applying to the Secretary by letter or otherwise.

SULPHUR AND FLANNEL BANDAGING IN RHEUMATISM.

Owing to the pressure on our space this week we are unable to find room for Dr. O'Connor's reply to Fuller's letter of last week, but we may state that Dr. O'Connor claims the credit, not for the external use of Sulphur in Rheumatism, but for the *conjunct* use of sulphur externally with flannel bandaging, and states that he communicated his mode of using these remedies to Dr. Fuller three years ago. Dr. O'Connor states that he did not inform Dr. Fuller of any written authorities on the external use of sulphur, but referred to the writings of Dr. Balfour and Dr. Grattan on the use of flannel bandaging.

OXYGEN GAS APPARATUS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Is there any apparatus known to the Medical profession for producing oxygen gas, and allowing of its gradual escape, for the purposes of disinfecting apartments, or as a palliative for consumptive patients in muggy weather? I am, &c. AMATOR SCIENTIE.

Mr. Preston.—It would be difficult to find scientific formulæ such as our correspondent requires. Vegetable astringents, and the tincture of cantharides diluted, are the essentials of the nostrums in common use.

Errata.—In our last number, page 363, col. 2, for "*casu*" read "*cum*;" for "*utimus*" read "*utimur*;" for "*Arctous*" read "*Arctaus*;" for "*Kahn*" read "*Kühn*;" for "*superias*" read "*superius*;" for "*hac*" read "*lac*;" and for "*rodunt*" read "*ludunt*." The letter in which these mistakes occur accidentally escaped the notice of the Editor.

Mr. Nicholson can obtain a supply of vaccine lymph at any time by writing to the Vaccine Institution, Russell-place, Fitzroy-square.

Mr. Cattlin.—Mr. Probert having declared that he considered his letter private, we do not think it would be advisable to renew the agitation of the question.

N. E.—The fact shall not be overlooked.

Dr. Minturn's paper on Vesico-Vaginal Fistula is in type.

COMMUNICATIONS received from—

DR. RIGBY; DR. MARKHAM; MR. PROBERT; DR. OGILVIE; DR. SNOW; DR. GAIRDNER; MR. H. SMITH; MR. ASHTON; DR. BRYCE; MR. PRIEST; MR. LEWIS; DR. MCWILLIAM; DR. ARMSTRONG; MR. SLACK; MR. CHAPMAN; MR. MAYSMOR; LUCINA; MR. ROBERTS, Brussels; DR. MOORE; DR. SMITH; DR. MINTURN, Paris; CRITO; DR. COTTON; DR. GORDON; THE GHOST OF DR. HUME; MR. PRESTON; MR. MORTON; MR. McDERMOTT; MR. BIGG; MR. RUMBALL; MR. NICHOLSON; MESSRS. WEEKS; DR. BRIER; MR. REDWOOD; MR. SANDFORD; MR. HEDLEY; MR. J. BROWN; DR. G. ELLIS; MR. J. ALLEN; MR. BURT; MR. JENKINS; MR. BLADDON; DR. BURNETT; DR. J. MANOAN; MR. J. ELLIOT; and MR. EDWARDS.

APPOINTMENTS FOR THE WEEK.

18. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; Westminster, 1 p.m.; King's, 2 p.m.; Charing Cross, 1 p.m.

ROYAL COLLEGE OF SURGEONS, 4 p.m.: Professor Quekett.
MEDICAL SOCIETY OF LONDON, 8 p.m.: Dr. Gibbon, "On the Identity of Typhus and Typhoid Fever."

20. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.; Orthopædic Hospital, 3 p.m.

CHEMICAL SOCIETY, 8 p.m.: Mr. Streaker, "On a New Base from the Juice of Flesh."

21. Tuesday.

Operations at Guy's, 1 p.m.

ROYAL COLLEGE OF SURGEONS, 4 p.m.: Professor Quekett.

PATHOLOGICAL SOCIETY OF LONDON, 8 p.m.

LINNEAN SOCIETY, p.m.

STATISTICAL SOCIETY, 3 p.m.

22. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 3 p.m.

GEOLOGICAL SOCIETY OF LONDON, 8 p.m.

ROYAL SOCIETY OF LITERATURE, 2½ p.m. Anniversary.

23. Thursday.

Operations at St. George's, 1 p.m.; Middlesex, 12½ p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.

ROYAL COLLEGE OF SURGEONS, 4 p.m.: Professor Quekett.

ROYAL SOCIETY, 8½ p.m.

24. Friday.

Operations at the Moorfields Ophthalmic, 10 a.m.; Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 3 p.m.

ORIGINAL LECTURES.

A COURSE OF LECTURES

ON THE

NATURE AND TREATMENT

OF THE DISEASES OF THE EAR.

DELIVERED AT

St. Mary's Hospital Medical School.

By JOSEPH TOYNBEE, F.R.S.

Aural Surgeon to St. Mary's Hospital, Lecturer on Aural Surgery at St. Mary's Hospital Medical School, and
Consulting Aural Surgeon to the Asylum for the Deaf and Dumb.

(Reported by JAMES HINTON, Esq.)

LECTURE XII.

Relaxation of Membrana Tympani.

SOME writers have doubted the existence of the disease about to be considered, viz. relaxation of the membrana tympani. Thus, Dr. Kramer (On the Diseases of the Ear, translated by Bennett, p. 143,) says, "I may be allowed to banish relaxation and tension of the membrana tympani from the catalogue of diseases met with in practice, in which I have, indeed, been preceded by Kard, who, however, has not adduced his reasons." Although the writers who preceded Dr. Kramer, and who had spoken of these diseases, had not described the symptoms nor the appearances by which they could be recognised, they were nevertheless correct in stating that the disease existed. Indeed, it appears to me, that no disease of the ear can be more distinctly diagnosed than the one under consideration.

The causes of the disease are, 1st, the effects of an ordinary cold producing hypertrophy of the mucous layer; 2nd, inflammation of the fibrous layers. From either of these causes the membrana tympani may lose its natural degree of resiliency and become flaccid; it thus falls inwards, and approaches the promontory more nearly than is natural. The result of this change is considerable dulness of hearing, which is, however, capable of relief by pressing out the drum to its natural position, either by swallowing while the nostrils are closed, or by making an attempt at a forcible expiration, or by drawing in the breath forcibly and rapidly through the nose. As soon, however, as the act of swallowing is again performed, whereby the air is allowed to escape from the tympanic cavity, the membrana tympani falls inwards, and the dulness of hearing immediately recurs. The treatment depends in some measure upon the cause of the affection. If the mucous membrane lining the tympanum is thickened, counter-irritation over the mastoid process should be practised; if the fibrous layers are inflamed, leeches should be applied to the margin of the meatus. Where the fibrous laminae are weakened, a solution of nitrate of silver applied to the outer surface of the membrane is frequently of great service. In some cases the deafness is not in the least degree relieved by aid of forcing the air into the tympanic cavity; in these instances it is most probable that partial ankylosis of the stapes has taken place. The following cases illustrate fully the symptoms and treatment of this disease.

Membrana Tympani relaxed; Deafness temporarily diminished after filling the Tympanic Cavities with Air.—S. B., Esq., aged 18, consulted me in November, 1853, on account of a dulness of hearing.

History.—Several years previously he became dull of hearing, without pain or any assignable cause; lately the affection has so much increased that he requires to be spoken to loud within the distance of a yard. The deafness is much increased during a cold. The power of hearing is greatly improved after he has blown air into each tympanic cavity, but as soon as the act of deglutition is performed, a sensation of weight is perceived in the ears, and the deafness returns. Upon examination of the right ear the membrana tympani was found to be opaque, and its bright spot elongated; it is more concave externally than natural. Upon swallowing or forcing the air while the nose is held, the membrana tympani assumes its natural form, and this remains until the act of deglutition is again performed, the nose being open, when it again falls

inwards. The hearing distance with the watch is half an inch. The left ear is in the same state as the right. The mucous membrane of the fauces is thick and red.

Treatment.—As there was an evident thickening of the membrana tympani, a vesicating paper was applied behind each ear, the sixteenth of a grain of the bichloride of mercury was administered every night, and a lotion was applied to the outer surface of the membrana tympani, consisting of three grains of nitrate of silver to an ounce of distilled water. This treatment was pursued for a fortnight, at the end of which time the patient's hearing was so greatly improved that he could hear distinctly an ordinary voice at the distance of three yards. This improvement remained until the patient took a severe cold, which caused the deafness to recur. A continuation of the treatment, however, again caused an improvement.

Membrana Tympani relaxed and congested; Symptoms diminished temporarily by a forcible Inspiration through the Nose.—J. J., Esq., aged 35, came to consult me in September, 1853.

History.—Since a child, has been subject to ear-ache in each ear. For a year or two this pain has occurred in the right ear only; lately it has been very considerable. Complaints of a feeling of rumbling in the ears, and of so considerable a dulness of hearing that he requires to be spoken to distinctly within the distance of a yard. The rumbling sensation in the ears and the deafness are both temporarily relieved by drawing in the breath suddenly and forcibly through each nostril; but this improvement disappears immediately the act of swallowing is performed, and if that act is delayed the symptoms slowly return in the course of some minutes. He has thus acquired the habit of incessantly "sniffing" the air, which is exceedingly unpleasant to himself and to every one around him. While sitting in my room he must have performed this act twenty or thirty times. Upon examination each membrana tympani was observed to be red and dull, the bright spot was much larger than natural.

Treatment.—As there was a palpable congestion of the membrana tympani, leeches were applied to the margin of the meatus, a vesicating paper kept on each mastoid process, and a warm solution of chloride of zinc (gr. ij. ad ʒj.) was dropped into each meatus twice daily. This plan of treatment was perseveringly pursued during three months, at which time the patient heard nearly as well as was natural, and he had completely abandoned the habit of sniffing up air forcibly through the nose.

Relaxation of Membrana Tympani, from thickening of the tympanic Mucous Membrane, produced by a cold; Deafness, improved by forcing air into the tympanum, and by syringing water.—Miss J., aged 50, applied to me in May, 1853.

History.—When a child suffered from disease of the left ear, which produced total deafness. For some years the left ear has been dull during a cold; at times the deafness is very considerable; at present, the patient requires to be spoken to loud within the distance of two yards, but, after forcing air into the tympanum, the hearing is temporarily improved, so that she can hear what is said in any part of an ordinary sized room. This improvement is also produced by the aid of syringing water; but, under either treatment, the dulness of hearing speedily returns. In order to keep up a tolerable amount of hearing, she has fallen into the habit of blowing air into the ears every few minutes. Upon examination of the right ear the hearing distance was found to be two inches. The membrana tympani was white, the surface was shining. Air entered through the Eustachian tube, and when it distended the tympanic cavity the membrana tympani was seen to move outwards to a much greater extent than natural. This movement was followed by a great improvement in the hearing, which, however, very soon disappeared.

Treatment.—Considering this to be a case of relaxation of the membrana tympani, produced by thickening of the tympanic mucous membrane, slight counter-irritation was produced over each mastoid process, and a solution of nitrate of silver (gr. iij. ad ʒj.) was dropped into each ear every night. Small doses of the bichloride of mercury were administered. After this treatment had been pursued for a fortnight a manifest improvement took place; the patient heard better, and had no occasion to force air into the ear; the habit had been nearly wholly overcome. I have seen this patient once or twice since—once during the year 1855—and the result of

the treatment has on the whole been satisfactory, the hearing remaining much better, except during an attack of cold, when the old habit of "clearing the ears" by forcing air into them was had recourse to.

PERFORATION OF THE MEMBRANA TYMPANI, AND THE USE OF THE ARTIFICIAL MEMBRANA TYMPANI.

When speaking of ulceration of the fibrous layers of the membrana tympani, I had occasion to point out that a perforation of the membrana tympani sometimes, though not often, takes place as a result. The usual cause of a perforation taking place in the membrana tympani is catarrh of the tympanic mucous membrane. In cases of catarrh of the mucous membrane a large quantity of mucus is excreted, and this fills the tympanic cavity; it is too viscid or too abundant to escape through the Eustachian tube into the fauces, and it consequently presses against the inner surface of the membrana tympani, causing a gradual absorption of its substance, and ultimately a perforation. That this affection is not the result of a primary ulceration of the mucous membrane lining the inner part of the membrana tympani is, I think, shown by the fact that in cases of perforation no appearances of ulceration are observed in any other parts of the tympanic cavity; indeed, as we shall see when considering the diseases of the mucous membrane of the tympanum, ulceration is comparatively a rare occurrence.

The most usual cause of perforation of the membrana tympani is an attack of scarlet fever; in other cases it is associated with scrofulous disease, the mucous membrane of the tympani throwing out a considerable quantity of mucus. The result of a perforation of the membrana tympani is, as all Medical men are aware, a certain diminution of the hearing power. A small orifice, if unattended with any other lesion of the organ, does not produce so large an amount of deafness as to render the patient uncomfortable; but if, in addition to a small orifice, there is a thickened and relaxed condition of the mucous membrane of the tympanum or of the remaining portion of the membrana tympani, then a very serious diminution to the hearing power occurs. A large orifice in the membrana tympani often does not produce any serious amount of deafness; but if it is accompanied by thickening of the mucous membrane of the tympanum, the patient is entirely debarred from conversation, except words are especially addressed to him in a loud tone, and within the distance of a yard. What is the cause of deafness in cases of perforation of the membrana tympani? There is, I think, no doubt but that one of the functions of the membrana tympani is to confine the sonorous undulations to the cavity of the tympanum, so that they may be concentrated upon the membrana fenestræ rotundæ. Indeed, as I shall have occasion to show, when speaking of the functions of the tympanic cavity, it is probable that the vibrations do not pass through the chain of bones to the vestibule, and that the air in the tympanic cavity is the only medium of communication with the labyrinth. If the prescribed means of communication with the labyrinth be the air in the tympanic cavity, it is palpable that an aperture in the membrana tympani is likely to diminish the power of hearing by permitting the vibrations to escape from the tympanic cavity into the meatus, and that they are no longer concentrated upon the membrana fenestræ rotundæ. This is, I believe, the explanation of the diminished power of hearing in cases of perforate membrana tympani, and it is confirmed by the result of the treatment adopted in these cases.

Treatment.—Until the last few years, deafness, arising from the presence of an aperture in the membrana tympani, was looked upon as incurable, and no systematic treatment was adopted, although several writers have alluded to the beneficial results following the treatment of a perforate membrana tympani by means of the introduction of foreign bodies, especially of lint and cotton wool. Thus Itard cites a case, in which the deafness was completely relieved by the introduction of a portion of cotton wool to the bottom of the meatus. Deleau speaks of a patient who greatly improved his hearing by the introduction of a piece of wood or the central part of an onion. Mr. Tod describes "the relief derived from the mere introduction of a little lint into the external meatus, in those cases where the membrana tympani has been ruptured or destroyed by disease. So great, indeed, is the improvement which takes place from the application of this simple

remedy, that patients will frequently appear astonished at being so easily relieved" (a). In the year 1848, Mr. Yearsley published a pamphlet, entitled "On a New Mode of Treating Deafness when attended by partial or entire loss of the membrana tympani, associated or not with discharge from the ear." In this pamphlet he advocates the application of cotton wool in a moistened state, in cases of partial or entire loss of the membrana tympani, the object of this substance being, as he has subsequently stated, "to support the remaining portion of the membrana tympani, or the ossicula."—*Provincial Medical and Surgical Journal*, August 18, 1852. With respect to the mode of applying the wool, the following are his instructions:—"A small piece of wool, differing in size according to the case, and fully moistened in water, is introduced through the speculum to the bottom of the meatus, and adjusted superiorly, inferiorly, anteriorly, or posteriorly, according to the situation of the perforation, and other circumstances connected with the case; but care must be taken that the entire opening be not covered, otherwise the experiment will not succeed. It is also indispensable to success that the moisture of the wool should be preserved." He also says, "It is far from my wish to discourage the attempts of others to place aright 'these magical bits of wool,' but truth compels me to add that, simple as it may appear, it is an operation requiring the most delicate tact to manipulate with success, which great experience only can confer."

After having conducted some researches into the functions of the tympanic cavity, which I laid before the Royal Society, and made some experiments upon the ears of patients suffering from perforate membrana tympani, I came to the conclusion that an artificial membrana tympani could be constructed, whereby the vibrations might be confined to the tympanic cavity and concentrated upon the labyrinth. I will give an outline of the course of investigation which I pursued. I first showed that the guttural orifice of the Eustachian tube is closed, except during the momentary action of certain muscles, and that, for all purposes relating to the passage of sonorous undulations, it is a shut cavity. I next showed, by a modification of Mr. Wheatstone's experiment with a tuning-fork, suggested to me by Mr. C. Brooke, that the sonorous vibrations communicated to the bones of the head appear much louder when the meatus externus is closed than when the orifice is open.

If, for instance, a tuning-fork be made to vibrate, and then placed in contact with the head, the sound proceeding from it will, in a few seconds, cease to be heard; but if, directly on this cessation of sound, the experimenter close the entrance of the meatus in one ear, so as to convert it into a shut cavity, he will immediately hear a renewal of the sound of the tuning-fork; from which it appears most probable that the sonorous vibrations communicated to the external meatus impressed the membrana tympani much more powerfully when confined to the cavity of the meatus than when allowed free communication with the external air. Considering the result of this experiment in connexion with the preceding fact of the ordinarily closed state of the tympanic cavity, it appeared to me highly probable that the sonorous vibrations imparted to the cavity of the tympanum, could only make their due impression on the membranes of the labyrinth, when strictly confined to the tympanic cavity, and were not allowed to expend themselves in the cavity of the fauces. This conclusion was strengthened by the recollection that all the walls of the tympanic cavity appear constructed for producing resonance, having an investing mucous membrane of such tenuity as scarcely to be detected, save by the touch, or by the use of a magnifying glass, and also by observing that this peculiar condition of the mucous membrane was restricted to the tympanic cavity itself, and to that portion of the Eustachian tube which forms a portion of the resonant walls of the tympanic cavity.

If the view here advocated be correct, and if, for the perfect performance of the function of hearing, it be necessary that the sonorous vibrations should be confined to the tympanic cavity, it is clear that the analogy usually cited as existing between the musical instrument, the kettle-drum, and the tympanum of the human ear, to the effect that in both, the air within should be allowed to communicate with that without, is incorrect; and it is also evident that an opening in the membrana tympani must, in a degree, diminish the

(a) *Anatomy and Physiology of the Organ of Hearing*. pp. 105, 6. 1852.

power of hearing. Upon the examination of patients affected with a simple perforation of the membrana tympani, this diminution in the ability to hear can, in fact, always be detected; although, as has been stated, if the orifice be small and the organ otherwise healthy, the difference is inconsiderable. In the greater number of cases, however, where perforation of the membrana tympani has existed, other lesions of a serious character have accompanied it—as thickening of the mucous membrane of the tympanum; pressure on the membrane of the fenestra rotunda; derangement of the articulation of the stapes with the fenestra ovalis; or injury to the nervous expansion in the labyrinth. Under any of these circumstances, it occurred to me that as an orifice in the membrana tympani, by preventing the sonorous undulations from being concentrated upon the membranous labyrinth, owing to their diffusion in the meatus, might be the direct cause of the diminished power of hearing, so it was probable that increased power would be the result of an artificial stoppage of the orifice.

As a result of the preceding train of investigations I was led to attempt the construction of an artificial membrana tympani, which it was hoped might serve as a substitute for the natural membrane, so far at least as its function of closing the tympanum and of rendering its walls resonant was concerned.

My hopes of success were strengthened by the result of some observations I had made upon cases of perforate membrana tympani. When these cases are not complicated with any serious lesion of the organ, it must have been remarked, by others as well as by myself, that the patient, from some inexplicable cause, at times suddenly hears perfectly well, or nearly so. This improved hearing sometimes remains a few minutes only, at others for one or more hours. Having found this improvement to follow the use of a syringe and tepid water, or even of the pocket handkerchief, I examined the ear in certain patients, after these operations had been effected, and I found in the former case that a bubble of water, and in the latter of discharge, filled up the orifice in the membrana tympani. Upon destroying the bubble the improvement in the hearing at once disappeared. In one patient I was able to keep up the improved hearing by the use, from time to time, of a solution of gum acacia in water. Upon reconsidering these facts, since I completed the observations upon the closed state of the tympanic cavity, I have arrived at the conclusion that the bubble of water, discharge, or mucilage acted beneficially by again confining the sonorous undulations to the tympanum, and this conclusion has been strengthened by subsequent observations.

After some experiments I tried vulcanized india rubber and gutta percha, making use of the thinnest layers of them that were procurable. With both these substances I succeeded in making a rude kind of artificial membrana tympani, by cutting a portion about the size of the natural membrane, and passing through it a piece of thread, by means of which and a fine tube it could be passed down to its proper situation. The tube was then withdrawn, and the thread alone left in the external meatus, by which the artificial membrane could be withdrawn at the pleasure of the patient or the operator. The disadvantages attaching to this apparatus were, difficulty of applying it on the part of the patient; liability of the material to be torn by the thread; and unsightliness of the latter hanging down from the meatus. The experiment, however, was sufficiently satisfactory to induce me to request Messrs. Weiss to construct one, the centre of which should consist of two very fine plates of silver, having a diameter of about three quarters of a line, between which the layer of vulcanized india rubber or gutta percha might be placed, and to the outer surface of one of these plates a silver wire was to be attached. The artificial membrana tympani made by Messrs. Weiss, from these directions, has hitherto been perfectly successful. As supplied by them, the portion of vulcanized india rubber or gutta percha is about three-quarters of an inch in diameter, which leaves sufficient margin for the surgeon to cut out a membrane of any shape that may seem to him desirable, and to leave the silver plate, either in the centre or towards the circumference, at his discretion. The silver wire is of sufficient length to admit of the membrane being introduced or withdrawn by the patient, but is not perceived externally except upon especial observation. A pair of forceps is made whereby the artificial membrane can be more easily introduced and withdrawn.

Before proceeding to describe the method of applying the artificial membrana tympani, I will say a few words respecting the state of the remaining portion of the membrana tympani after perforation has taken place. The orifice is in some cases not larger than a small pin's head, in others it is a line in diameter, while in many cases the entire membrane is destroyed, with the exception of a margin at the circumference about half a line in diameter, which, being composed of the combined fibres of the thickest portion of the circular and radiate laminae, generally remains. This margin is deepest at the upper part. In some rare cases, the long process of the malleus continues entire after the complete destruction of the membrane to which it was attached; but, as a general rule, the whole of this process is gradually absorbed, leaving merely the head of the bone which articulates with the incus, the neck, and the body which receives the attachment of the tensor tympani ligament internally; anteriorly and posteriorly the fibres of the remnant of the membrane are attached, and externally the processus brevis remains. It will therefore be understood that, in cases of so-called destruction of the membrana tympani, a margin is generally left, to which the body of the malleus remains fixed, and to the inner part of which the tensor tympani ligament and muscle are attached, affording the means by which the small bones and muscles of the tympanum are still enabled to perform their functions. In cases of general ulceration of the mucous membrane of the tympanum, which fortunately seldom occurs, the incus is generally discharged, and sometimes the malleus also; but even in these cases, if the attachments of the stapes to the circumference of the fenestra ovalis remain uninjured, the power of hearing may be much improved: should the stapes however be removed, total and irremediable deafness ensues.

The cases in which the artificial membrana tympani is of the greatest benefit are those where there is a well-defined aperture in the natural membrane, or, if it be entirely absent, where there is simple hypertrophy of the mucous membrane of the tympanum, with or without discharge from its surface. In these cases it will be found that the organ has by no means entirely lost its power of discerning sounds; as a general rule, the human voice is heard when the mouth of the speaker is situated within about a foot of the patient's ear, and when the words are spoken slowly and distinctly. The diminished power of hearing just noticed, while it entirely excludes the sufferer from the advantages of general conversation, is, however, greatly aggravated when, to the affection of the membrana tympani and mucous membrane of the tympanum, the stapes has become ankylosed to the fenestra ovalis, or the nervous expansions have been injured. In such cases, where the patients require to be shouted to close to the ear, the artificial membrane will not prove of any service.

ORIGINAL COMMUNICATIONS.

ON THE STATISTICS OF AMPUTATIONS PERFORMED UNDER CHLOROFORM.

By JAMES ARNOTT, M.D.

ALTHOUGH many have objected to the proposition, that the statistical, or numerical method, is the best means of ascertaining the true character of every Medical practice, none have disputed that it is the best in certain instances. Wherever, indeed, a remedial agent acts by an unknown process, or wherever its action is not cognizable by any peculiar signs, we have no other means of arriving at a knowledge of its properties. But for the fact that many more die in crowded or ill-ventilated hospitals than in those of a different kind, we should never have learned that foul air is so pernicious in its agency; nor could the present sanitary improvements in respect to cities have been founded on any other base than statistics. The injurious effect of chloroform on the results of operations, furnishes another example of a Medical truth which could have been discovered in no other way, or in none, at least, so satisfactorily. That it is a strongly depressant or prostrating agent, and, consequently, a predisposing cause of pyæmia and other fatal affections succeeding operations, can, independently of statistics, be only surmised from the comparatively few cases in which this prostration and other morbid symptoms are manifest.

In the *Medical Times and Gazette* of October 25 and November 1 last, there appeared a set of tables illustrative of the ulterior effects of chloroform on the result of Amputation and Lithotomy. I limited my data to those furnished by the London Hospitals, because there existed no means of forming a comparative standard of the mortality after these operations in the Provincial Hospitals before the introduction of chloroform; but in doing so I lost the advantage of a great mass of facts which would have very much strengthened my argument, that chloroform has increased this mortality. Although no such standard can be framed, the mortality after chloroform may, in many Provincial Hospitals, be compared with that existing before its introduction, and the number of statistical facts be thus largely increased.

The following table comprises the whole of the British Hospitals that, so far as is publicly known, can furnish the requisite data; viz., returns showing the rate of mortality before and after chloroform was in use. I have made a careful search, and will be surprised to learn that I have omitted

a single hospital respecting which such returns have been published. I have also made application to many other hospitals, in the hope of obtaining more extended information, but, with one solitary exception, I have not been able to increase the number of returns. Still, there are probably several which could furnish such data, and the hope may be indulged that this information will not be finally withheld. For, although many will be perfectly satisfied with the amount of statistical information already obtained, more will be required by others, in order to remove all doubt from their minds.

The data on which this table is constructed are almost all unexceptionable. Most of the returns before chloroform was in use were furnished to Dr. Simpson from printed or published documents, and those after its introduction, inserted in the *Medical Times and Gazette*, are satisfactory in every respect. Both sets have the great advantage of having been prepared by parties perfectly without bias as respects the question under consideration.

Table showing the recent Increase of Mortality after Amputation of the Thigh, Leg, and Arm in Four London and Fourteen Provincial Hospitals.

Hospitals.	Authorities.	Period of Observation.	Before Chloroform.		Authorities.	Period of Observation.	After Chloroform.		Increase of mortality since Chloroform.
			Cases.	Deaths.			Cases.	Deaths.	
Bartholomew's.....	Mr. Haig.	1846	22	4	Medical Times and Gazette.	1855-56	31	9	10.9 per cent.
University Col....	{ Mr. Potter.	1835-46	103	24		1855-56	21	7	10 per cent.
St. Thomas's	{ Mr. Cadge.					1855-56	23	9	12.5 per cent.
Guy's	Mr. South.	1842-47	49	13		1855-56	59	17	17.6 per cent.
Oxford	Dr. Fenwick.	1843-45	36	4		1848-56	76	18	Average increase of mor- tality (equal periods being taken) 12.5 per cent.
Liverpool Royal	Mr. Hussey.	1838-47	69	5		1855-56	16	3	
Liverpool South....	Dr. Simpson's Statistical Table.	1835-36	43	3		1855-56	5	1	
Sheffield		1846	4	2		1855-56	12	4	
Leicester		1845-46	4	..		1855-56	9	5	
Dundee		1845-46	15	1		1855-56	9	2	
Derbyshire		1844-46	11	1		1855-56	23	11	
Gloucester		1845-46	11	2		1855-56	13	6	
Hull		1842-44	32	7		1855-56	12	2	
Berkshire.....		1840	7	..		1855-56	7	2	
Cumberland.....		1840-45	19	5		1 year	4	2	
Sussex		1845-46	8	1		1855-56	15	4	
York		1844-46	13	6		1855-56	11	2	
Glasgow	1845-46	8	3	1853	33	13			
	Dr. M'Ghie.	1840-46	137	54	Dr. M'Ghie.				

The Provincial Hospitals in the table are grouped together, and made to yield an average rate of mortality. When the hospital is small it may be considered as a ward of a larger hospital, and it would be useless to give its rate separately. It will be seen that the three last in the list show a decrease instead of an increase of mortality. Although, as respects two of them, this increase from the small number is of no greater importance than the difference of mortality in different wards of a large hospital, an obvious explanation is afforded by the mortality before chloroform having been much above the usual average. The instance of Glasgow can be accounted for partly in the same way; the mortality in the period before chloroform having been, in proportion to numbers, greater than in any British hospital, and dependent, no doubt, on causes which were remarkable. Mr. James, of Exeter, states in his valuable paper on the statistics of amputation, that additional accommodation for the surgical patients in the Glasgow Hospital was to be made by enlarging the building; but Dr. M'Ghie, in the able remarks accompanying his statistics of this hospital in the *Glasgow Medical Journal*, only mentions the appropriation of part of the adjoining Fever Hospital to surgical cases. The extraordinary change, however, in the rate of mortality from primary amputations, would lead to the opinion that the system of surgical practice in that institution had undergone considerable alteration. I have dwelt longer on this point than I would have otherwise deemed necessary, to show the necessity of not taking the statistics of any particular hospital as a standard. It may be added, that the great mortality in the first period of the Berkshire Hospital was owing to 13 of 19 cases having been primary; and that as the first period of Guy's Hospital is so much under the usual average, no use was made of it in forming the standard for the former London rate of mortality.

Taking the increase of mortality, since the introduction of

chloroform, of the London and Provincial Hospitals together, it may be said, in round numbers, to amount to 12 per cent.; and it must not be forgotten that this increase has taken place during the advance of surgical science in all other respects, and of improvement in the general management of hospitals. I must confess that the apathy with which such evidence as the above has been received surprises me. Are not the ultimate results of chloroform as worthy of observation as those that are immediate? Not a sudden death happens without some excitement or discussion, without some new assurance being forthwith published that the death might have been prevented had the writer's peculiar mode of exhibiting the drug been adopted; while the excessive mortality secretly produced by its ulterior effects is passed over without remark because it is secret. I believe that a considerably less fatality might be the consequence of exhibiting chloroform in a different manner from the present, but this lessening would hardly affect the argument. The quantity of chloroform absorbed by the blood might be reduced, and more care be taken in selecting the cases. The slow absorption of the anæsthetic by means of the instruments called inhalers (strangely recommended in the face of directly opposing facts as a perfect security against sudden death) probably renders a larger quantity necessary to produce insensibility than a quicker absorption, and consequently produces a greater ultimate mortality. As respects selection of cases, several very erroneous rules have been given, founded on the great misconception that chloroform is not a depressant. But although there might be a considerable reduction of mortality from improvement in the mode of administration and the selection of cases, this will not amount to a degree authorising the general employment of chloroform, even if we had not, in the great majority of instances, a perfect and safe substitute for it.

SIX CASES OF CALCULUS IN THE BLADDER, WITH REMARKS.

By ROBERT GARNER.

Surgeon to the North Staffordshire Infirmary.

I shall be obliged by the insertion in the *Medical Times and Gazette* of the following six cases of calculus vesicæ, and to them I also beg leave to append a few practical observations. Probably the operation of lithotomy would be generally less fatal, were Surgeons unexceptionally to follow the practice now advocated by most of the eminent writers on surgery; I mean a very limited incision of the outlet of the bladder, in contradistinction to that recommended by the author of the *Surgical Dictionary*, a free second incision. Without proposing a revival of anything like the apparatus major, dilating gorgets, etc., we may perhaps believe that Le Cat's maxim, "little incision, much dilatation," does not merit the censure passed upon it by Mr. Cooper. Indeed when the stone is known to be small, it does not appear to be necessary to cut the prostate at all, at any rate to cut the membranous part of the bladder must increase the danger of the operation in several ways. The writer of this article claims to be no authority; he has, in the following cases, only adopted the best examples of the present day. Simplification appears to be a good maxim in lithotomy. The staff should be steadily held by the assistant throughout, the handle at right angles with the patient's body, and the operator need not take it at any stage of the proceeding. He cannot fail to cut into the groove of the instrument if it is not excessively hooked up against the pubes, and therefore a staff bent at right angles does not appear necessary. Beaked knives only render this part of the operation more difficult; a long scalpel, narrow for children, broader for adults, may be used throughout; and during the incision of the prostate, it may, perhaps, be held, either as we hold a pen, or, as naturally and elegantly, with the hand in the same position as when cards are dealt. It seems less becoming to introduce the left forefinger into the anus, which however may be done advantageously in the first incisions, and then after wiping it, it may be used to depress the rectum during the second. To wound the gut is a misfortune more annoying and troublesome, perhaps, than fatal. The left index finger is also the best blunt gorget or dilator of the neck of the bladder; the forceps follows after it, and then commonly upon opening the blades, with an imperceptible shake at the same time, the stone will fall between them. The spoon-shape bladed forceps is commonly most successful in seizing a stone, but if it be a very small one, a pair with flat blades opening parallel is best. The bladder may be well washed out by raising the patient, and using an enema syringe, having a smaller tube than the one for the stomach, but of the same kind. In the following cases no tube with lint was left in the wound; but when the prostate is only very slightly nicked, it appears best to use them, for in that case the patient often has still the power to retain the urine, and indeed may continue to pass it more or less per urethram at intervals; and then there must be danger of the wound immediately closing. In the cases following little preparatory treatment, excepting a dose or two of castor oil, was commonly adopted; chloroform was always administered, and, after the operation, opiates.

Case 1.—A healthy labourer, aged 63, admitted July 1, 1856, at the North Staffordshire Infirmary. Symptoms of stone for some years; latterly quite disabled from work, and his health suffering. The symptoms as usual, with pain in the testis. The urine clear and acid. Several stones detected.

8th.—Lithotomy. Three stones of triple phosphate extracted, one with some difficulty; the weight of the largest 1 ounce and 6 grains, and the size 2 inches by $1\frac{1}{4}$; another $6\frac{1}{2}$ drachms; and the third, 8 grains.

10th.—A shivering fit and fever were the precludes of inflammation of the wound.

11th.—The wound sloughy, and the phagedæna continued to spread for some days, with prostration, delirium, and deafness. Opium and stimulants were administered pretty freely.

16th.—The sloughing stopped, bed-sores formed, bad diarrhoea, and, either from the rectum having been touched in the operation, or injured in the extraction of the stones, or by

the spread of the phagedæna itself, it was found to communicate with the wound, and, therefore, the two cavities were laid into one.

25th.—A large wound, but clean; the deafness gone; patient somewhat rallied.

August 12.—Better; the wound contracted, purging less; a little urine passes per urethram.

October 1.—Wound all but healed, only a few drops of urine passing by it; sores on the back well; health good. Made O. P. Since seen quite well, and the wound admirably repaired by nature.

Case 2.—A collier, sickly-looking, aged 21, admitted September 23, 1856. Symptoms of stone have existed ever since he was quite a lad, but not violent till about two years back. He is now unable to work.

26th.—Lithotomy. A round knobby mulberry calculus, weighing $1\frac{1}{2}$ ounces, was extracted without any difficulty.

October 1.—The patient has done well, though it was thought best to apply a few leeches. A little urine passes the right way.

16th.—The wound almost healed.

30th.—The wound once quite healed, but to-day a superficial sinus was laid open.

November 26.—Health improved; the wound healed. Discharged. Since seen quite well, but a small calculus had passed per urethram.

Case 3.—A tolerably healthy boy, aged 3, admitted Nov. 20th, 1856. Has suffered severely from the usual symptoms for twelve months, very fretful, prepuce elongated.

21st.—Lithotomy. A soft roundish calculus of oxalate of lime, the size of a hazel-nut, removed. A quantity of sand was felt in the bladder, and cleared away by injection.

Dec. 10th.—All the urine passes the right way, and the wound is closed. Discharged.

Case 4.—A pretty healthy, but rather intemperate labourer, aged 63, admitted Nov. 28th, 1856. Symptoms for four years, but worse for fifteen months; much pain about the perinæum and end of the penis; as in the preceding and following cases, bloody urine after any exertion. On sounding a stone was felt; it was supposed but one.

Dec. 1st.—The lithotrite was introduced after injection of the bladder, and a stone soon seized, but at first it started suddenly from the instrument. It was again caught and crushed two or three times. Some slight difficulty occurred in withdrawing the instrument, owing to its being clogged. The patient had afterwards much pain, shivering, &c.

3rd.—A catheter was passed, there being reason to suppose there were fragments about the membranous part of the urethra. Few bits passed by the urine, which was bloody, phosphatic, and mucous.

5th.—Rather easier, bladder injected, but few particles have come away.

10th.—Urine clearer.

20th.—The bladder recovered, and lithotomy was performed at the desire of the patient. The fragments of a very hard and compact uric acid calculus were removed, put together they formed a stone $1\frac{3}{4}$ -in. by 1 and 3-8ths in diameter, also another intact $1\frac{1}{4}$ -in. in diameter, and a much smaller one from the prostate. A recent coating of the phosphates covered the calculi.

30th.—Has done well; some of the urine passed by the urethra.

January 27.—Discharged cured. When last seen, he said he was obliged to obey the impulse to urinate quickly; in other respects well.

Case 5.—A healthy lad, aged 5, admitted February 27, 1857. The usual symptoms for six months.

28th.—Lithotomy. Stone uric acid, the size of a marble. The perineal artery bled profusely, and a finger was held upon it till the stone was extracted, when the bleeding did not return.

30th.—Doing well; urine passing freely by the wound.

March 10.—Urine passes in part per urethram.

17th.—The urine all passes the right way, the wound closed. Discharged.

With children, lithotomy appears to be a very safe measure; but, in adults, it is well known to be attended with more risk. It may, perhaps, be still worth inquiring, how far chemical remedies, either administered by the mouth or injected into the bladder, may succeed in dissolving calculi. In case of stones of known phosphatic composition, the plan might pro-

bably often succeed, either alone or in conjunction with lithotripsy. The phosphatic calculi in *Case 1* were easily soluble in a weak solution of nitric acid (5 drops to an ounce of water). As is well known, the Vichy water has a high reputation in these diseases. Calculi of uric acid are more difficult to dissolve in their respective menstrua than the phosphates. The following was a case where a chemical remedy was persevered in for very long periods, apparently with little effect:—

Case 6.—*No operation.* The *Warwickshire constitutional water*.—Mr. G., a private patient, aged 76, suffered five or six years ago from an attack of retention of urine, having had also, some time before, a perineal abscess, which was opened and did well. On passing the catheter a calculus was plainly felt. He declined any operation, and shortly after had recourse to the above-mentioned *nostrum*, which appears to be a solution of pearl-ash, and large quantities of which the patient drank for many months. At first the alkali appeared to have a good effect; indeed, he considered himself cured, having occasionally passed small calculi, and being tolerably easy, though blood sometimes continued to appear in the urine.

About Christmas last he again suffered from an attack of retention of urine. It was often bloody and purulent, sometimes very scanty, sometimes copious and clear, though the catheter was passed at regular intervals. Under the use of the instrument, and with small opiates, he seemed to be somewhat improving. He had, however, been subject to severe attacks of vertigo, and one morning he was found dead in bed, having been seen at daybreak to draw up the blind of his chamber window. At a post-mortem examination the writer found six uric acid calculi in the bladder, three of them being about one drachm each. They were very smooth, and rather irregular in form.

The operation of crushing or lithotripsy, even with some practice, appears to be one, not to be undertaken without, at the least, quite as much trepidation as lithotomy. It requires more tact, particularly medical, than the treatment by cutting. No doubt in some hands, and in some cases, it is successful; but many Surgeons, we think, will do best with lithotomy, which need not, as we have endeavoured to show, be reckoned a very fatal operation, not so much so as the greater amputations—of the thigh, for instance.

CASE OF EXCISION OF THE OS CALCIS.

By EDWARD ATKINSON, Esq.

Late Assistant-Surgeon to the British Hospital, Smyrna.

Aboulafia, aged 54, a Jewish rabbi of great distinction and learning, has lived in Jerusalem most of his life, and was, by consequence, among the besieged when, in 1826, the city was bombarded by the Egyptians. It was during the Jewish feast of Tabernacles, when the Israelites, as of old, leave the house below and dwell in booths, or temporary green bowers, on the roof. Aboulafia then was reclining in his airy tabernacle, when a shell from the besieging enemy burst on a neighbouring housetop, and a fragment struck him on the right heel, lacerating the soft parts on the hinder half of the sole, but not perceptibly wounding any bone. Seven months he kept his bed, and at last the wound healed, leaving only a minute fistulous opening, which occasionally discharged a little matter. For a period of twenty-six years after this he enjoyed the full use of his foot, and during that time he visited Europe for seven years, when he not unfrequently walked considerable distances. Early, however, in 1853 a morbid growth began to appear in the old cicatrix, which slowly but steadily grew till it attained the size of an orange. This tumour was of a fungous character, having a tuberculated appearance, and its surface was thickly studded with minute holes or pores, through which a cheesy sebaceous-like matter oozed on pressure, with a peculiarly bad smell. At this time the patient was under the care of my predecessor, Mr. Sim, who in 1854 removed the tumour. He found that it grew by a pedicle from the under surface of the os calcis, and therefore sawed away a thin lamina of the bone, in which he apparently embraced the whole diseased surface, the section having a healthy aspect. After many months the wound cicatrised, but soon the disease reappeared in the same situation. Mr. Sim now, hoping to arrest the morbid action by atrophy,

placed a ligature on the anterior tibial artery, but without the desired effect. This was followed by caustic applications. The strong nitric acid, the "Vienna paste," and the nitrate of silver were successively tried, but without permanent benefit.

I saw the patient for the first time last November, when Dr. Macgowan (who had watched the case for the previous fifteen months) introduced me to him. I found a large cicatrix in the position above described, sound everywhere, except over the middle of the inferior surface of the os calcis, where was a round button-like projection of unhealthy granulations as big as a shilling. This possessed all the peculiarities of the former tumour, as to its secretion, its cribriform appearance, spongy texture, and offensive odour; besides which, it bled freely on the least touch. Since the growth was slow, and capable of being held in check by escharotics, we agreed to continue their use for the present. In a few weeks, however, the disease became so active as to make the patient solicitous of more decided treatment, only declaring that he would not submit to amputation.

But one course remained to me, viz., to excise the os calcis, or part of it, without disturbing other bones, provided they were found healthy. The patient is a large and very stout man; and, though in good general health, yet not a promising subject for such an operation. However, no other proceeding was open to me, and so, on February 5, I had him brought under the influence of chloroform. My first incision was from internal malleolus to external, passing under the sole, just behind the diseased portion. I next made two short incisions from the first, enclosing the whole of the compromised integument in a triangle, and converging towards the middle of the sole. Lastly, I prolonged the angle of convergence by a cut at right angles to the first.

Having in the next place dissected out my heel-flap, I endeavoured to save the patient the infliction of so deep a wound and so great a loss of substance in this important part of the foot's arch, by applying the saw to the back of the heel, and sawing off obliquely forwards about one-third of the bone. But, alas! I found the cancellated structure thoroughly filled by the disease throughout its entire extent. I was therefore compelled to divide the tendo-Achillis, and widening all my incisions, proceed to disarticulate the bone—a matter rendered more difficult than before by the loss of purchase in removing part of it first. Only one ligature besides that of the posterior tibial artery was required. After the removal of the calcaneum, search was made to discover traces of disease in the neighbouring bones, but none was detectible. Owing to previous loss of substance by the disease and former operations, and owing to the portion of integument taken away at this time, the wound could not be closed, or even nearly so; a great hole remained, which I filled with pledgets of lint. I must admit that I had many misgivings as to the immediate results, for the constitution of the patient, and his long confinements to bed, were not the most favourable circumstances, when coupled with considerable obesity. However, nothing interrupted the progress of the case; very little sloughing took place, and granulation set in at the end of a week. Now (less than six weeks since the operation) the whole wound has filled up from the bottom with healthy granulations, nearly to the level of the sole. Nothing has distressed the patient, but the occurrence of a small abscess over the internal malleolus, which is daily reducing in size. There is, thus far, no sign of the re-appearance of the disease.

Jerusalem, March 16, 1857.

"SPIRIT RAPPING" IN PARIS PUT DOWN BY THE EMPEROR.—The Paris correspondent of the *Brussels Independance* writes:—"I can state upon authority that the sudden departure of Mr. Hume, the spirit-rapper, was in obedience to an order from the Emperor. The Empress was so much affected that her august consort dreaded the continuance of the diabolical scenes. A few days ago, the Emperor met the learned physician, M. Becquerel, and remarked, 'I want to consult you upon what I saw that trickster do;' and his Majesty then told how Mr. Hume had made a table turn round without touching it, and caused it to be struck by an unseen hand as many times as he liked. The Emperor received from the physician the very natural reply, 'Sire, I can say nothing upon facts which I have not witnessed.'"

THE LONDON
PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

REPORT
ON THE TREATMENT OF
CANCER BY DILUTE SOLUTIONS OF
THE CHLORIDE OF ZINC.

(Cases under the care of Mr. STANLEY.)

WE give to-day in some detail the particulars of the cases to which we alluded a few weeks ago, in which Mr. Stanley has pursued the plan of treating cancer by much-diluted solutions of the chloride of zinc. Their results certainly prove that the destruction and enucleation of an ulcerated cancerous tumour may be effected by the use of solutions so weak as to be all but painless, and without necessitating the confinement of the patient to bed for a single day. Without venturing at present to assert that this plan, when persevered in in a great number of cases and in various conditions of health, will be found to be absolutely void of danger, yet most will doubtless admit that the risk attaching to it will prove to be infinitely small, far less than that of excision, and that which attended the use of arsenical pastes. As far as we know, chloride of zinc, when used in its most dilute solutions, never causes deleterious effects from its absorption into the system, nor does its application ever tend to excite erysipelatous inflammation of the part. An operation for the removal of a cancer, involving as it does the exhibition of chloroform, a considerable loss of blood, a period of a week or so in which the patient is feverish and ill, and takes little food, and subsequently a considerable suppuration, must be granted to be likely, even in those cases in which the patients recover well, not to have exerted any beneficial influence on the subsequent health. And such indeed is but too frequently observed by those who follow up their cases after dismissal. It is not at all uncommon to find patients who have never regained such health as they had prior to the excision, although their recovery from its immediate effects may have been as satisfactory as usual. Without, therefore, saying anything whatever as to the probability of the return of the disease being greater or less after one or the other method of removal—for as to this we have as yet no facts, and to speculate would be worse than useless—we may safely assert that the plan which Mr. Stanley is trying possesses some very important advantages. Nor is it among the least of these that it may be expected to prove useful in certain cases not well suited for the knife, as, for instance, where the cancer is deeply ulcerated and borders upon important parts. In some regions of the body it will be inconvenient of application while others will be particularly appropriate for it. On the tongue, in the cheeks, on the lips, etc., it can manifestly be used but very imperfectly, and will probably never supersede the knife; while it may be applied with ease and efficiency to cancers of the breast, or indeed of any well-exposed surface, and particularly to those of the penis or of the extremities.

While on this subject we may just notice as an additional fact a case in which Mr. Hutchinson has been employing a solution of the strength recommended by Mr. Stanley against a large recurrent fibroid tumour of the uterus. The woman, an out-patient at the Metropolitan Free, had been twice operated upon during the past year, but after each the tumour had again appeared and increased with great rapidity. At the time the trial of the solution was made it had grown to the size of an infant's head, and filled the uterus, projecting a little at the open os. The plan adopted was to pass a small catheter into the middle of its structure, and gradually inject into different parts about two ounces of the solution (one ounce of Sir W. Burnett's fluid to eight of water). This was repeated every third day for about three weeks, and had the effect of causing some fragments of the growth to slough and come away. They were, however, of but small size when compared with what remained; and as the tumour went on increasing it was at length desisted from. No ill symptoms had been caused, although a good deal of smarting would generally follow the injections.

Case 1.—ULCERATED CANCER OF THE BREAST—
USE OF THE SOLUTION—ENUCLEATION OF THE
TUMOUR—RECOVERY.

(Reported, with the three following cases, by Mr. EDGAR BARKER, House Surgeon.)

Mrs. A. F., aged 69, an ill-nourished and feeble old woman, of anxious, careworn expression, but of general good health, was admitted into Sitwell Ward, Nov. 13, 1856. Her history was as follows:—She had always lived in the country, in the enjoyment of good health, till fifteen months ago, when she first perceived a small hard swelling, about the size of a nut, in her left breast; this gradually increased in size, accompanied by occasional severe attacks of pain. About four months ago the skin near the nipple ulcerated; the nipple has entirely disappeared; the centre of the gland is occupied by a tumour of about $2\frac{1}{2}$ inches in diameter, of stony hardness and considerable weight; the ulcerated surface is about an inch in diameter, its edges are raised and everted, the discharge is sanious and very fetid; the glands in the axilla are large and indurated. The chloride of zinc lotion was applied, and the patient put on a nutritious diet. On the 22nd of November, one part of Sir W. Burnett's solution of chloride of zinc, with six parts distilled water, in which small pieces of lint were soaked, was adjusted to the size of the ulcer; the application was removed every two hours; it however caused much pain, and was therefore further diluted with two more parts of distilled water.

December 1st.—The application of the lotion has formed a greyish slough over the whole of the ulcerating surface, which is dry and unaccompanied by fetor. The patient's general health remains good; the lotion has been applied six or eight times in the course of the day, and has caused but slight pain.

This treatment was continued till the 24th of December; a large mass of the slough, nearly two inches in diameter, was removed, and the exposed surface was covered by healthy florid granulations; the upper margin still remaining indurated, the lotion was directed to be applied to that border only.

January 2nd.—The lotion, causing some considerable irritation, was discontinued for some days, but was then resumed for four days.

January 30th.—The cavity is half its former size, the upper border remains hard, but to a smaller extent; the granulations are numerous, small and florid, especially at the lower border. Her health still continues good; small portions of slough occasionally come away from the upper border.

Feb. 11.—The solution is still applied to the upper border six times a day; there is decidedly less induration on the upper margin, and the glands in the axilla remain in the same condition as before.

March 14th.—The solution has been steadily applied since the above note; the hardened mass seems to have nearly all come away; cicatrization has gone on uninterruptedly, and the ulcerated surfaces are now about the size of a sixpenny-piece.

March 19th.—She was discharged. Her health still continuing good, and the sore all but healed.

Case 2.—CANCER OF THE BREAST—REMOVAL OF
THE SKIN AFTER FREEZING, AND SUBSEQUENT
USE OF THE SOLUTION—GRADUAL SLOUGHING
OF THE CANCER—RECOVERY.

Mary Burton, aged 68, was admitted into Lucas's ward, February 18, 1857, on account of carcinoma of the breast, of five years' duration. She states that when she first noticed the swelling it was very small, but at times painful. It remained much in the same state for six months; it then began again to increase, which it has done slowly up to the time of admission. She is a tolerably well-nourished woman, of cancerous aspect, but of general good health. She does not remember any other case of cancer to have occurred in her family. She has also an enlarged indurated gland of the size of a pea in the axilla. She was put upon a nutritious diet, with a pint of porter; and on February 23, after the skin had been rendered insensible by the application of ice and salt, a circular incision was made, and the skin over the diseased mass removed. The application of the solution of the chloride of zinc, in the proportion of one part of Sir W. Burnett's disinfecting fluid to eight of distilled water, was commenced the

next day. The application caused some pain, but of a trifling nature. The lotion was applied three times a-day for some days; the nutritious diet was continued, and the patient's general health remained good. A greyish eschar formed, one-eighth of an inch in thickness, on removal was extremely tough, and presented the appearance of moist wash-leather.

March 3.—The lotion was discontinued, wetted lint was applied, and the casting-off of the slough was soon accomplished. After removal the breast appeared as if a portion of its gland had been scooped out, looked healthy, had a cicatrizing edge, granulations were abundant and florid. Some considerable induration remained around the edges.

March 16.—The solution was again applied, in the proportion of 1 part to 9 of water, which has been continued up to the present time, small portions of slough being removed daily. The induration is gradually becoming less. The patient still remains under treatment.

April 22.—The small sore which now remains is perfectly healthy, and fast healing.

Case 3.—CANCER OF THE BREAST—EXCISION OF THE SKIN AFTER FREEZING, AND SUBSEQUENT USE OF THE SOLUTION—COMPLETE ENUCLEATION OF THE TUMOUR ON THE EIGHTH DAY—RECOVERY.

Mary Poyner, aged 44, a delicate, anæmic, though tolerably stout woman, was admitted into Sitwell ward, with a tumour of the left breast of a cancerous nature (about the size of a walnut). On examination a swelling was felt, as it were, imbedded in the mammary gland immediately below and around the nipple, of carcinomatous hardness; the skin over the tumour was puckered, the nipple retracted. She also had an enlarged, though not indurated, gland in the axilla. She complained of sharp darting pain in the breast. She was also often troubled with menorrhagia. She was a single woman, and stated that she first noticed the lump on her breast fifteen months ago; it gradually increased till six months ago; since that time it has been stationary, but the pain has been more acute. She was put upon a nutritious diet, with a pint of porter and 4 ounces of wine daily; and on March 18, after local anæsthesia had been produced by the freezing mixture, the skin was removed to the extent of an inch in diameter, including the nipple. Cold was applied for some time, on account of slight hæmorrhage; and on the day following, the lotion, in proportion to one part of the solution to 8 parts of distilled water, was applied to the wound. It was repeated two or three times during the course of the day, the application causing slight pain. It was afterwards continued, in the proportion of 1 to 9, for seven days, when it was entirely left off; and on the eighth day the entire slough was thrown off. No induration remained around, the granulations looked healthy, though pallid. A bread poultice was applied, and the wound has now considerably contracted, and the patient will be discharged in a day or two. The gland in the axilla is scarcely to be detected, and the patient's general health has considerably improved since she has been under a course of cinchona with the sulphate of iron.

Since the above note the wound has quite healed, and no trace of induration now remains.

Case 4.—LARGE AND DEEPLY ULCERATED CANCER IN THE GROIN, SECONDARY TO CHIMNEY-SWEEP'S CANCER.—USE OF THE SOLUTION WITH SOME BENEFIT.

Edward Gillett, aged 39, was admitted into Darker Ward, under the care of Mr. Stanley, on December 29, 1856.

History.—Is by employment a chimney-sweep, living in Brook-market; of free habits. He states that, about two years ago, a cancerous mass was removed from the scrotum by Mr. Stanley; all did well, and the wound healed. About eight months ago a small, hard swelling appeared in the left groin, somewhat like a boil; this ulcerated, and its induration had gradually extended, the ulceration also extending. The pain was slight at first, but lately it has become very severe. On admission it presented the following appearance:—

In the left groin was an excavated ulcer, about three inches in length transversely, and one in its vertical direction, and about an inch in depth. Its interior was irregular, presenting at some points eminences, at others depressions. There was a constant discharge of a thin sanious pus, of a very

fetid character. The edges of the ulcer were everted and ragged; its margin was indurated for about an inch; the skin covering the induration was of a dusky-purple hue.

Lotio sodæ chlorinatæ was ordered, to free the ulcer of its fetid smell; pil. saponis c. opii, gr. v. o. n., as the patient complained of the pain being so severe as quite to prevent him ever having rest at night.

The ulcer remained much the same, and on

January 2, a lotion, composed of 1 part of Sir W. Burnett's disinfecting fluid, to 6 parts of water, was applied on lint, which was adjusted to the size of the cavity, and ordered to be changed every two hours.

3rd.—As the first application pained him considerably, the strength of the lotion was diminished, 1 part to 8 being now employed. A yellowish eschar has formed over the ulcerated surface since the application yesterday, and the fetid character of the discharge has subsided. The pain was much less, though it still interferes with his rest at night. He was ordered—

Haust. morph. acet. gr. $\frac{1}{2}$, o. n.

10th.—Since the application of the fluid the cavity has greatly enlarged in width and depth. The general health of the patient is good. A large mass of diseased structure has come away. The pain attending the application is now but slight.

12th.—As there was some inflammation of the surrounding integument, he was directed to leave off the lotion for a time.

19th.—The inflammation having entirely subsided, he was ordered to renew the application.

22nd.—Small portions of the diseased structure are continually coming away. At the upper part are some healthy granulations. The hard circumference has considerably diminished. He continues to apply the lotion every two hours, which now does not give him pain, and he sleeps well at night without the morphia. His health is good.

In this case the ulcer was too deep and extensive to permit of a cure being obtained, and the ulceration still extending, the man subsequently left the Hospital. The application had, however, well shown its power in procuring the sloughing of many portions of the cancerous structure, and a great consequent abatement of pain.

**PUNCTURED WOUNDS OF THE ABDOMEN—
PROTRUSION OF INTESTINE—PERITONITIS—
ESCAPE OF FÆCES BY ONE WOUND—
RECOVERY.**

(Under the care of Mr. LAWRENCE.)

(Reported by Mr. WALTER CHIPPENDALE, House-Surgeon.)

W. B., aged 28, a bricklayer by occupation, was brought to the Hospital on November 19th, about 5 p.m., having a few minutes previously fallen from a height of more than twenty feet upon a railing, in consequence of a ladder, which he was ascending at the time, having given way. Those who witnessed the accident stated that he remained impaled upon, and wedged between two of the spikes, until he was extricated. The spikes were about four inches in length, and rather more than that distance apart, and were connected together by a transverse bar of iron. On admission he was in a very depressed condition, complaining of great pain in the abdomen.

When the clothes were removed a small lacerated wound was seen immediately to the inner side of the anterior superior spine of the right ilium, the edges of the wound were jagged and irregular, and its direction appeared to be obliquely upwards and inwards. About an inch and a half above and to the inner side of the wound, there was a small oval swelling, about the size and shape of half a walnut and of a slightly livid colour. This was felt to be intestine, protruded through a rent in the muscular wall, and elevating the integument at that point. It was easily reduced, requiring, however, a compress to keep it in position. There was also another small irregular wound in the right lumbar region. Considerable hæmorrhage took place from both wounds, more especially the one in front. The neck of the right femur was likewise found to be broken. The limb was not shortened, but the foot was everted, and crepitus was distinctly to be felt. Breathing entirely thoracic. Abdomen extremely tender. Forty minims of laudanum were at once given, and the dose repeated three hours afterwards.

November 20th.—The man passed a quiet night after the

second dose of opium, sleeping for some hours consecutively. Vomiting occurred early this morning, and has continued the whole day. The stomach is unable to retain anything. Water, even, is immediately rejected. The vomited matters consist principally of bile. He lies on his back, with the uninjured limb drawn up, breathing with the thoracic muscles alone. The abdomen is tense, and very intolerant of pressure. Countenance anxious and sunken. Pulse, 120; small and feeble. Skin cool. Is very thirsty. A draught containing five minims of hydrocyanic acid and ten of laudanum was ordered every four hours.

As the hydrocyanic acid did not check the vomiting in the slightest degree, a drop of creosote was given every two hours, and a suppository, containing three grains of opium, given in the evening.

21st. The vomiting became much less frequent after the suppository was given, but it has recurred this morning; the rejected matters of the same character as before. He slept for two or three hours consecutively during the night. Complaints of considerable pain in the abdomen, especially in the neighbourhood of the wound. Pulse 128, still feeble. Tongue moist, but covered with a thin white fur. Skin rather hot. Eight leeches to the abdomen. Two grains of calomel every six hours.

22nd. He derived considerable relief from the leeches, complaints of less pain in the abdomen, and the sickness has abated. Did not require any opium last night. Pulse less frequent, 112. The abdomen is tense and tympanitic, the bowels have not acted since admission. Up to the present time, the man has not taken any nourishment whatever, but to-day he has a desire for food. Ordered to have enema, containing four ounces of infusion of senna.

23rd. The enema brought away a considerable quantity of fæces, and the bowels have acted once freely since, motions abundant and natural. Feels himself considerably relieved. Wounds looking healthy.

25th. Has complained to-day of an increase of pain, more particularly in the situation of the diaphragm. Skin hot. Pulse 124, rather sharp. Is very thirsty, and has had a return of the vomiting. Twelve leeches to be applied, a pill containing calomel, antimony, and opium to be given every six hours.

26th. Was considerably relieved by the leeches, but still has pain about the right hypochondrium, which is intolerant of pressure. Sickness decreased. Pulse less frequent and less sharp. A blister to the left side.

30th. Has continued to improve up to the present time, but still complains of occasional pain in the abdomen. Bowels are now rather relaxed. Appetite improved.

Hitherto, it has not been considered necessary to employ any apparatus for the broken thigh, as it was never supposed that he would have so long survived so severe an injury, but the ordinary long splint has now been applied. Brandy ʒvi . Beef-tea, arrowroot.

December 5th.—To-day it was observed that the poultice applied to the wound in the right loin was stained with a thin yellow discharge, of a decidedly fecal odour. The bowels continue to act regularly, and well-formed healthy motions are passed per anum. In every other respect is going on well. Two grains of quinine three times a-day. Mutton chop; porter, Oj .

10th.—The fecal discharge from the wound in the right loin still continues. It is of the same light yellow colour as before, but is much more abundant. The bowels still act regularly by the natural passage. He is apparently much exhausted by the escape of the intestinal contents, although he takes a large quantity of nourishment and of stimulants in the course of the day. Countenance pale and haggard. Pulse small and feeble; tongue invariably dry. Occasionally delirious. Porter, two pints; brandy, ten ounces.

16th.—Has greatly rallied the last few days, and feels much stronger. The wound in front has almost closed, and the posterior opening is reduced to a mere sinus, through which fecal matter still continues to exude, but in much less quantity.

28th.—Has progressed favourably since last note, but is still very emaciated and haggard. The fecal discharge has much diminished in quantity. The wound in front has quite healed.

From this time he rapidly improved. On the removal of

the splint, the thigh was found to have firmly united. The limb was scarcely, if at all shortened. The posterior wound soon closed, and he was discharged January 20th, having remained in the hospital rather more than two months from the time of his admission.

HOSPITAL NOTES.

LACTIC ACID A REMEDY FOR DYSPEPSIA.

A remedy which has for a long time been used by Dr. Nelson, of Birmingham, and subsequently by many French Physicians, under the name of Pepsine, for the cure of dyspepsia and other functional derangements of the stomach, has within a short time been prescribed freely by some Physicians in London. It has been very favourably noticed by Drs. Ballard and Sieveking. Dr. O'Connor has also tested its value in those cases in which it has been recommended, but not with the success attributed to its use. He was led subsequently to have recourse to Lactic acid, a remedy which he believed likely to be more beneficial in those affections of the stomach in which the so-called Pepsine has been administered. Before using the acid internally, Dr. O'Connor, we understand, in order to test its digestive powers as compared with Pepsine, placed an equal weight of animal fibre, in equal proportions of Pepsine and Lactic acid, in separate vessels, in an equal temperature, when he found that the fibre in the Lactic acid was reduced to a pulpy state in a very much smaller space of time than that which was put into the Pepsine. After this experiment, which he thought sufficiently conclusive of the superiority of the Lactic acid as a promoter of digestion, he had recourse to its use as a remedy in those affections of the stomach before alluded to. The great number of patients with affections of the stomach presenting themselves among the out-patients of the Royal Free Hospital, afforded an extensive field to Dr. O'Connor for testing the efficacy of Lactic acid in dyspeptic conditions. After a trial in over fifty cases, he considers that the good results following its use fully justify him in recommending it as a valuable agent. It is very necessary to be sure that the Lactic acid prescribed should be of chemical purity, and of uniform strength. The dose varies from half a drachm to two drachms or more, in infusion of colomba, or a little cinnamon-water. It should be taken during a meal. The Lactic acid found in shops is not generally pure; that which Dr. O'Connor has found to be most efficient, from its greater purity, is prepared by Mr. Bastick, of Brook-street, Grosvenor-square.

OBLITERATION OF THE SAC IN CASES OF FISTULA LACHRYMALIS.

Mr. Critchett has tried, during the past week, in two cases under his care in the Moorfields Ophthalmic, the plan recommended by Demours for the cure of inveterate cases of fistula lachrymalis, from obstruction of the nasal duct. It consists in laying the sac freely open with a small scalpel, and then, after waiting for the bleeding to cease, applying the actual cautery to the whole of its interior. The intention is to obliterate the sac and its ducts, thus destroying wholly the efferent part of the lachrymal apparatus. M. Demours asserts that after this has been effected the lachrymal gland either ceases to secrete, or, what is more probable, continues to do so to so small an extent that no inconvenience from overflow of tears results. It is averred that the annoyance resulting from loss of the organs of lachrymation is exceedingly slight indeed, and not generally perceptible. Whatever may be thought as to the probability of this theory *à priori*, the results of the practice in Paris are stated to have been very good. That there is a class of cases of this nature so exceedingly difficult of relief as to warrant resort to even such extreme measures, will be admitted by most Ophthalmic Surgeons. Mr. Critchett's cases are as yet only under observation, and nothing can consequently be stated as to their results. Should they prove successful we shall, at some future time, enter into more detail respecting the operation.

ANEURISM OF THE AORTA, OPENING INTO THE TRACHEA.

Although much talked about, sudden death from bursting is well known to be in reality one of the least usual

modes of death in aneurism, whether internal or of one of the large vessels of the extremities. In a majority of cases in which rupture of the coats does occur, the changing of the case into one of diffused instead of circumscribed aneurism is the first result, and the patient often lingers a considerable time in this condition before death. Now and then, however, the sac gives way directly, either into one of the large cavities of the body or externally. One such has recently occurred at the City Hospital for Chest Diseases, to an out-patient of Dr. Risdon's Bennett's. The patient was a middle-aged man, who presented symptoms of thoracic aneurism, but in whom the tumour had not yet reached the surface. Suddenly one morning, at his home, he began to vomit blood most profusely, and in a very short time was dead. A Surgeon was called in, but arrived only after death had occurred. Mr. Cousens, the resident Medical Officer of the institution, obtained permission to perform a post-mortem, and found that a large aneurism of the arch of the aorta had given way directly into the trachea. The condition of things was, indeed, very similar to that which occurred in the case of the late Mr. Liston.

LARGE INDURATED SWELLING IN THE ILIAC FOSSA.

A man, who was admitted about a week ago, under Mr. Lloyd's care, into Piteaim Ward, St. Bartholomew's, presents a condition which is well worth the attentive observation of those who may have an opportunity of seeing him. He is about 36 years old, and looks pale and ill, and suffers from a large indurated tumefaction in the lower part of the right iliac region. The swelling adheres to the abdominal parietes, and is most prominent where it is connected with Poupart's ligament. No sense of fluctuation can be detected, though its outline, especially above, is ill circumscribed, and not unlike that of an abscess. He states that the pain commenced about two months ago, but that the swelling has not been great until quite recently. He was for a month under Dr. Brinton's care in the Royal Free Hospital, and derived much benefit from the treatment, but relapsed, and became worse than ever soon after his discharge (three weeks ago). The question of diagnosis is at present an exceedingly difficult one. Whether the case is one of malignant disease, or whether it is an abscess forming around the cæcum, or in connexion with the appendix vermiformis, must be left for time to determine.

PHLEGMASIA DOLENS AFTER FEVER.

Dr. Risdon Bennett has at present under his care in St. Thomas's Hospital a case of much interest, in which phlegmasia dolens has followed typhoid fever. The patient is a young woman previously in good health, and the attack of fever was a mild one. Just as the fever was passing off she began to complain of pain in the iliac fossa and down the thigh, and shortly after swelling of the leg took place. The swelling has since increased until it now involves the whole extremity, and presents an excellent example of the condition known as "White leg." About the upper part of the thigh are numerous enlarged superficial veins, which may no doubt be held to denote the obstruction of the deeper ones. She is now in very fair health, and her countenance is not expressive of much constitutional suffering. There have not occurred any indications of secondary abscesses or deposits of pus in the joints. Phlegmasia dolens has been described as an occasional but rare sequela of fever, both by Glasgow and Dublin physicians; but our impression is that it is of extreme infrequency in London, and has not attracted much attention, even among those of large hospital experience. Dr. Graves has recorded a case at page 261 of the first volume of his Clinical Lectures, in which a young woman just recovering from fever, with gastric symptoms, had a sudden development of pyæmic symptoms, attended with swelled leg. Death took place on the seventh day after this outbreak, the attack having been marked by severe rigors, with intense pain in one breast, and in various parts of the extremities. In it, however, the symptoms were much more acute than in that now under Dr. Bennett's care, and resembled those of pyæmia, rather than of phlegmasia dolens. The connexion between these affections and fever is probably to be found in the absorption of some irritant materies from the intestinal ulcers, and the production by it of phlebitis of the pelvic veins. The difference between the two cases above mentioned is, doubt-

less, that in the one an adhesive inflammation has been set up, causing obliteration and the phenomena of obstruction only; and in the other a suppuration one, causing contamination of the blood, and the symptoms of general pyæmia.

TUMOUR OVER THE SACRAL REGION IN AN ADULT, RESEMBLING A SPINA BIFIDA.

We have more than once lately had occasion to advert to two cases, one under the care of Mr. Husband, in the York Hospital, and one under that of Mr. Athol Johnson, in the Hospital for Sick Children, in which solid tumours over the sacrum have been found to communicate with the spinal canal. A very interesting case in relation to these is now attending Mr. Hutchinson's out-patient room at the Metropolitan Free Hospital.—John E., aged 32, a tall, healthy looking man, of good development, applied for advice on account of a very painful and tender tumour over the lower part of his sacrum. It is oval in shape from above downwards, and about the size of a fist, being situated exactly in the median line, rather more than a hand's breadth above the coccyx. The skin over it is pale and smooth, and quite loose. It is whiter and smoother than the adjacent skin, and has no hairs, looking in these respects exactly like what is sometimes observed over a spina bifida. At a distance apparently of about three-fourths of an inch from the surface, the boundary of a cyst containing fluid is easily and distinctly felt, the whole cyst being seemingly about as large as a duck's egg. This cyst cannot be lifted up, nor can the finger be pressed under its base, as it evidently has deep attachments to the laminæ of the sacrum. In the base of the cyst are felt some solid plates, as if cartilaginous. The examination of the part causes much pain, and pressure, he states, gives him "odd feelings in the head, and sparks in the eyes." About this latter observation, however, there does not seem much of positiveness. As to history, the tumour first attracted attention when he was about the age of 13, and he feels sure that it did not exist in infancy. He had been laid up in the Oxford Hospital under the care of Mr. Tucker, to have a tumour excised from near the left knee, at the time that he first discovered the one over the back. About thirteen years ago he was in St. Bartholomew's Hospital, under the care of Mr. Vincent and Mr. Lloyd, by whom he states that the tumour was called "a painful tumour over the spine," and who charged him never to allow any Surgeon to operate upon it. Since then he has never been under any Medical treatment until the present time, and has not suffered any material inconvenience, excepting from pain. Latterly the pain has increased, and he is now willing to submit to any measures thought advisable for its treatment. Considering the probability that it communicates with the spine, and that, despite the history of its not having been congenital, it is, in fact, a spina bifida, Mr. Hutchinson has declined to adopt any surgical means. The pain appearing to be of neuralgic character, the application of belladonna is being tried, and the construction of a metal shield is proposed, by which to protect it from pressure.

THE PAIN AFTER THE APPLICATION OF DR. FELL'S CAUSTICS.

There is a woman now in the Cancer Hospital at Brompton, named Louisa Brown, who states that she left the Middlesex Hospital about eight weeks ago, having been there seven weeks in Stafford Ward, during which time Dr. Fell had many women in the same ward upon whom he applied his caustics almost daily. So far from these applications being painless, as some have asserted, Louisa Brown states that the screams and cries of the women were so dreadful, and their moaning at night so heart-rending, that she could not bear to stay in the Hospital, and left on that account. She says that the first applications are not very painful, but that the "dreadful pains" began two or three hours afterwards, and lasted throughout the three weeks or more occupied in the removal of the diseased part. Some women suffered more than others, but all to a very great degree. Vomiting was also very troublesome. Many women had two and three composing draughts in the course of each night, but still the pain was very severe. We may add that this account is corroborated by the statement of a lady we have seen in private practice who was under Dr. Fell's care.

EXPECTED OPERATIONS.

At St. Bartholomew's, this day, (Saturday) Mr. Skey has

two cases of removal of necrosis. At King's College, on the same day, Mr. Fergusson has a case of removal of the testis, one of excision of an exostosis, and a plastic operation for procidentia uteri. Mr. Bowman has a removal of an encysted tumour from the temple. On Monday, at the Metropolitan Free, Mr. Hutchinson proposes to remove with the écraseur a small malignant growth under the tongue; and there are also several lesser operations. At Guy's, on Tuesday, several operations of much interest are in prospect.

NOTES AND QUERIES.

We that questioneth much shall learn much.—Bacon.

No. 202.—DRY TREATMENT OF CATARRH.

All your readers are acquainted with Dr. Williams's "dry method of treating catarrh," but few of them, perhaps, are aware, that a similar plan was recommended, and practised, some 130 years or more ago, by Dr. Richard Lower—him of the *Tuberculum* reputation.

Appended to Dr. Lower's *Tractatus de corde* is a chapter on Catarrhs. Here he treats at length on the causes, seat, and nature of catarrhs, and, arguing thereon, arrives at their treatment by an easy transition. "Inasmuch," says he, "as the materials of the catarrh are supplied by the serum of the blood, the first indications for treatment are—to cut off the pabulum which supplies the serum, and to eliminate the serum existing in the body by the kidneys, the bowels, and the skin."

"Hence," he goes on, "at the first onset of the catarrh, provided there be no fever, nothing more conduces to its suppression than long suffering from thirst—*ut sitim diutissime toleremus*—induced by the avoidance of all fluids. I have known many entirely cured of their catarrhs by three or four days' abstinence from drink; and the explanation of this is, that (the fomites of the catarrh being withdrawn) the catarrh dries up, just as streams do after a long drought—*non aliter ac rivuli exarescunt ex pluviarum penuria*."

The above extracts have been interred some ten years in my note-book; but perhaps you may think the small historical incident worthy a corner among your Notes and Queries.

W. O. MARKHAM.

Clarges-street, April, 1857.

No. 203.—RENNET v. PEPSINE.

Why has my old friend Rennet changed its name, and and taken unto itself that of Pepsine? Why should we pay a long price for "Liquor Pepsinæ," when, at any time this ten years, we could get a pint of it for eighteenpence as "Essence of Rennet, by Crosse and Blackwall," at one's grocer's? And let me assure my brethren, that a very excellent food for children or invalids, or for that matter anybody, is made by heating a pint of milk, sweetened with a little sugar blood-warm, and then adding a teaspoonful and a half of the essence of rennet, stirring once or twice, and setting by till cold, when a little nutmeg may or may not be grated on the top. It is often retained when other food is not—is generally much liked, for it is a very light curd, and children take it readily. It is a good addition to fruit or fruit-tarts, and may be made, with the addition of brandy or sherry, if desirable, for a debilitated person. Another recommendation is its extreme cheapness, and it certainly is no novelty to West-countrymen.

Tunbridge-wells, April 11th, 1857.

N. E.

No. 204.—LEONINE ACCOUCHEMENTS.

Having read among your Queries, a glance at the popular superstition respecting "Leonine Accouchements," I send you the following variation in this dangerous belief, which came under my own especial notice. In the year 1851, several deaths occurred in a town of Surrey, either at childbirth or from its effects, and one of the widowers informed me that his medical attendant had attributed the mortality to the year being that of Leonine Accouchements, which he considered septennial and partially fatal to the pregnant human female. Is it wonderful that such an absurd notion gains ground with the ignorant, when it is supported by an M.D.S.C.D., and a F.R.C.S., Ireland?

LUCINA.

ANSWERS.

No. 198.—HAMPSSTEAD WELLS.

Your querist "Smokianus" will find, from Mr. Corfe's answer, that the Hampstead spring is still in existence, and also the part of Hampstead in which it is situated, but there is no analysis given in Corfe's answer, which, however, "Smokianus" requires. Now, in looking over several works, I have been able to discover one analysis in one book only, viz., *Rees's Cyclopædia*, the extract from which I have copied verbatim. After stating it to be a chalybeate water, it runs thus:—"The most recent analysis of this water is by Mr. Bliss, according to whom a wine gallon contains of—

	Cubic inches.
Carbonic acid	10.1
Atmospheric air	90.9
	101.0
	Grains.
Oxide of iron	1.5
Muriate of magnesia	1.75
Sulphate of lime	2.12
Muriate of soda, nearly	1.0
Of silex, about . . . . .	.38
	6.75."

We may gather also from Rees (Cyclo.) that these wells have not been much resorted to for a considerable time, for, under article "Hampstead," it runs, "Near the eastern extremity of the village there is a spring of mineral water, which was formerly much frequented."

N.B. "Rees's Cyclopædia" was published in the year 1819.

A Mr. Goodwin, of Hampstead, published a book on the properties of these waters in 1808, from which perhaps "Smokianus" may obtain more complete information.

H. L. MAYSMOR.

Regent's Park, April 11, 1857.

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A NEW POISON.—M. de Luca has just communicated to the Academy of Sciences the discovery of the poisonous principle of the *Cyclamen Europæum*, or common sowbread. This tuberculous plant has long been used in medicine as a violent purgative, and externally as a resolvent and a remedy for the ear-ache; but it was not known that it contained a powerful poison, producing effects not unlike those of the curara, which the Indians of the Rio Negro use to poison their arrows with. M. de Luca obtains it by digesting the root for 45 days in alcohol, then pounding the root, digesting it again in a fresh quantity of alcohol, and repeating this process until the pulp had lost its acrid taste. All the tinctures thus obtained are then left to spontaneous evaporation in a cellar. At the end of about 40 days a whitish substance is deposited, which, after being repeatedly washed in boiling alcohol, is left to dry in the dark. The cyclamine, or vegetable base of the cyclamen, thus produced is white, opaque, and brittle, and emits no particular smell; it absorbs the humidity of the air, becomes transparent and gelatinous in water, and assumes a dark colour when exposed to the action of light. It is a curious fact that, while pigs can eat any quantity of the root with impunity, not only the active principle itself, but even the natural juice of the root, acts as a poison on small fish, if mixed with the water in which they are in the proportion of 1 to 3000. Four grammes of the juice injected into the trachæa of a rabbit caused it to die in convulsions in the course of ten minutes. Bromine appears to be an antidote to this poison, or at least to mitigate its effects considerably; it has the same neutralizing power over the curara poison.

Medical Times & Gazette.

SATURDAY, APRIL 25.

HIGH FARMING AND MODERN MEAT.

VEAL and beef were formerly two very distinct things, both good in their way, and one the boast of old England. The practice of modern farming has however condensed these two articles of manufacture into one villanous compound, having too close a resemblance to the Gallic "ros-bif," for any Englishman to acknowledge with satisfaction. Rich, full-flavoured, mature beef, is becoming an extinct thing; and our tables, instead of groaning under the burden of a baron or sirloin, groan at it; or, at any rate, echo our groans and complaints. But this question has other bearings than upon our gustatory pleasures. It has its influence upon the health and vigour of the people, especially upon that of our town population. Let us see how this statement is to be made out. It involves a tale of agricultural economics which every physiologist and sanitary reformer will admit as demonstrative. The farmer fattens cattle, not, as we citizens in our self-complacent and patronising moods are apt to imagine when we read the long figures of arrivals at the markets every week, for the mere sake of feeding us and getting a fortune out of our carnivorous propensities, but coupled with a very different object. The modern farmer also looks upon a beast as a machine for manufacturing manure. This in some shape he must have. The corn crops, on which his main prosperity depends, crave it imperatively in some shape, and nothing now known answers so well as the home-made product. Guano, superphosphates, and the thousand-and-one delusive compounds puffed with all the quackery of pseudo-science, are not to be trusted; and until modern chemistry produces something better than has as yet been forthcoming, the farmer must trust to himself and his beasts. But the thing must be done cheaply. And how? Why, by taking the youngest possible stock, and forcing them most unnaturally. Under the present management it takes about nine months to bring a bullock into a fit state for slaughtering, and in that time it acquires an average increase of about twenty stones in weight. It is now difficult to find lean stock of anything like mature age in the markets, and they are commonly bought in for the fattening, at something like two years old. Home-breds, or calves weaned on the farm, are taken up much earlier, and are often ready for the butcher long before they have reached the end of their second year. We all know that these young creatures gain a much larger proportionate increase of bulk from a given quantity of food, and in a given time, than older cattle would; and we all know, too, the character of this fast-grown flesh and the evils attending it. But the oil-cake, turnips, beet, hay and straw, are passed through the machines, and kept under the machines, as well as if they were good six-year-old bullocks, and if they endure the ordeal without becoming the subject of disease that calls for immediate execution, they make beef of a quality up to the present standard. Still every farmer will admit that the great risk and loss in this process of manufacture arise from deaths by disease, that the sale of the beast does not make a sufficient return for the cost of feeding and tending, and that the profit comes largely out of the application of the manure accumulated and rotted in the yards to the lands destined for corn crops.

It is impossible to estimate the mortality or the amount of disease arising out of these circumstances, for there are no returns to appeal to. However, every man who has had the opportunity of looking into such matters is well aware that

it is far beyond even the imaginings of the most horror-stricken vegetarian. Let any person, familiar with the laws of life and health, but who only knows a bullock in its relation to the metropolitan markets and the shambles, picture to himself a young creature, whose natural term of existence runs over a space of some fifteen or more years, suddenly taken in its first or second year, and confined in a small close yard, there fed to its utmost capacity upon the most nutritive food, debarred from anything like reasonable exercise, and allowed to stand or lie night and day upon a fermenting and putrefying mass, generally on an average some two feet thick, of its own excrement, straw, and other refuse of the barns and fields, not made the better, though perhaps more sightly, by a fresh layer of clean litter thinly laid every day or two upon the surface. Let him say what plain common-sense, as well as his philosophy, dictates must be the result, and he will only be describing every-day occurrences. Early and late it is necessary to watch these tender, hot-bed, fungoid growths. Disease is constantly springing up spontaneously; the most trifling accident tends to a fatal issue; doctoring won't answer with such material, and the butcher's knife is the only remedy to save the beast for the market. The most prosperous result is, that the animal, when it has done its allotted work of manure making, finds its way to our tables just at that stage of its development when it is naturally most prone to disease, and less fit for consumption or food, even if healthy, than at any other period. This unquestionably is an evil, and one which our Officers of Health have not investigated. We throw out the suggestion for their consideration; and we may also venture to hint an opinion, founded upon strictly true physiological principles, that our graziers who pursue these practices are in the end their own enemies.

We have upon our table the answers to a series of questions relating to this subject, by a most intelligent, practical Norfolk man. In them we find all that we have said fully borne out, regrets that no other course should be open to the farmers, and proof that the true solution of their difficulty, as well as of ours, consists in the economical use of the refuse of our towns for agricultural purposes.

THE WEEK.

In our impression of last week we recorded the melancholy circumstances attending the death of Dr. Alexander, in Ireland; and it will be recollected that, although it was clearly proved that arsenic had been swallowed, yet no trace of the poison was discovered in the body of the deceased. In the case of Palmer the counsel and the chemical witnesses for the defence relied very strongly upon the fact that no evidence of the presence of strychnia could be obtained by post-mortem examination; but we now find that arsenic, a substance far more unalterable than strychnia, may actually disappear from the animal tissues in no very lengthened period. It seems, therefore, to be proved that a man may die from an easily detectable poison, and yet none may be found in the body.

We are happy to find that Mr. Griffin's claim to remuneration from the Weymouth Board of Guardians, on account of services rendered in consultation in some difficult cases, has been at last admitted, and that the whole of the fees claimed by him have been paid without deduction. The principle is thus established, that the Medical officers of Unions are entitled to receive fees when called in consultation to patients residing out of their own district; but to render the claim legal it is necessary for the Medical officer to have an order from the Relieving officer, or, in case of emergency, from the Overseer. We understand that another Medical officer of the Weymouth Union has also been paid a fee for attending, in consultation, a difficult case of midwifery out of his own dis-

strict. We congratulate Mr. Griffin upon his triumphant success in establishing a principle so important to the Medical officers of Unions throughout the kingdom; and we wish him equal success in the other points on which he has been so long engaged in an unequal struggle with the Poor-law authorities. His success in the present instance proves the necessity of continuous and unremitting exertion, and we think that his Medical brethren of the Poor-law Unions owe him a very deep debt of gratitude for the ceaseless care which he has evinced in promoting their interests.

In his last report on the health of Marylebone, Dr. Thomson describes some simple precautions which may prove valuable to workmen who have to penetrate through smoke in cases of fire, or to those who have to enter sewers or wells. In the inquiry respecting the conflagration at Covent Garden Theatre, it was affirmed by one of the firemen that he was unable to reach the stop-cock which would have enabled him to flood the building, in consequence of the stifling nature of the smoke which filled the room in which the water-pipe was situated. A bladder, or india-rubber bag, blown full of air supplied with a mouth-piece, inserted between the teeth, would have enabled him to save the building; or, in the absence of these necessary accompaniments of the fireman, a hat or cap secured round the mouth with a handkerchief, would enable a spectator to be supplied with air free from smoke, and, to rescue the inmates of a house on fire. Every fireman should be supplied with several air-bags. We should be glad to see specimens of these air-bags prepared for trial.

The Emperor of the French has conferred the Cross of the Legion of Honour upon several Medical Officers of the army and navy. The names, which were published in the *Gazette* of Tuesday, will be found in another column. Twelve army Medical Officers and one Veterinary Surgeon are made knights of the order. One of our naval brethren is made an *Officer* of the Legion, and three Surgeons Knights. Such recognition of professional service is too encouraging to be overlooked.

A vacancy in the West Norfolk and Lynn Hospital has led to a contest of some Professional interest. We are informed by a correspondent that one of the candidates, Mr. Whiting, is a homœopath. He is an old resident and in good practice, and formerly was one of the Surgeons to the Hospital; he is also a magistrate, and but lately retired from the Town Council. Mr. Cotton, the other candidate, was also eighteen years connected with the Institution as Surgeon, an office he relinquished very recently owing to sudden ill health. He is likewise one of the Borough magistrates, and has just resigned the office of Alderman. If our correspondent's statement, that Mr. Whiting is a homœopath, be correct, orthodox and heterodox Medicine are now on trial at Lynn.

The *Times* of Tuesday and Wednesday contains a long account from the Vienna correspondent of that paper of the three varieties of murrain prevalent on the continent—the first a sort of catarrh or influenza, the second a typhoid pneumonia, and the third a contagious typhus. We described the leading symptoms of these affections some weeks ago. The Austrian Medical Police does not consider the "malignant catarrhal affection" contagious. The typhoid pneumonia is said to be contagious, and the following are the sanitary measures adopted:—"The herd or farm is strictly examined, and all those animals that cough are put on the sick list, and must be kept apart. As the 'lung disease' is believed to be contagious, not only the herd in which it prevails,

but also the men who tend it, are kept from communication with the surrounding farms, hamlets, etc. Instead of being driven out to graze, the cattle are fed on the premises, and it has been observed that a change from green to dry food always produces a good effect on the animals which are still healthy. The sick cattle have their own attendants, who are not allowed to go near the other stalls, and a healthy animal is never allowed to drink out of a pail which has been used by one that is unwell. The carcasses of the cattle which die must be buried in a very deep pit, with the straw on which they had lain. If the cattle are skinned, the skins are for a time to be put into a lime-pit. If the disease assumes a very malignant form in any place, a cordon is drawn round it, which is not raised until six weeks from the time of the last death. The stalls or stables in which sick cattle have been kept are always scrupulously scoured, the various implements cleaned with strong lye, and the cribs, mangers, etc., washed with a solution of chloride of lime. Some time must elapse before the convalescent animals can safely be allowed to join their fellows." As to the contagious typhus, the writer says, "the best and most economical method is to knock every animal on the head as soon as he is attacked by it." It is said to be invariably imported into Austria, and as soon as the disease is known to be on the other side of the frontier a strict quarantine is established.

A pamphlet by the President of the College of Physicians, entitled "Medical Examinations and Physicians' Requirements considered," will be opened with some interest just now, in the present state of the Medical Reform question. Dr. Mayo thinks the competitive examinations now coming into fashion likely to lead to the neglect of Clinical medicine; and that the system as pursued at the College is, on the whole, better for Medical examinations. He commends the attempt to raise the standard of preliminary or *anterior* education, and regrets the decline of the "intellectual freemasonry," which existed to a greater extent, he thinks, formerly than now between Physicians and the upper classes, by means of the common study of the dead languages. He concludes his able pamphlet by the hope, that when this new Bill comes on—if at the last some slight differences may appear to linger between the Universities and Corporations, which, however, he does not expect, "the Government will exercise that most legitimate influence by which the differences incident to every large body made up of sections, heretofore acting under separate banners, may be induced to yield to the general good." We shall see. In the meantime, the questions raised by Dr. Mayo on Medical examinations are well worthy of discussion.

In the *Gazette* of Tuesday last, the announcement was made that Dr. Locock had been created a baronet. The professional position of the new baronet, and the reasons which have led to this elevation to hereditary rank, are so well known, that it is only necessary to congratulate Sir Charles Locock on the honour he has attained and so well merited.

THE WATER OF PARIS.—In a paper lately read before the Academy of Sciences at Paris, M. Boussingault has shown that the water contained in the wells of Paris is impregnated with nitrate of potash, or saltpetre. It is true that this water is not generally used for drink, but wine-dealers water their wines with it; and although nitrate of potash may be taken with impunity in much larger doses than can be imbibed with the water, still its presence is unquestionably injurious to the public health. In consequence of this discovery the baking establishment of the hospitals of Paris has resolved to use Seine water for making bread, instead of the water brought from the wells of the neighbourhood.

OUR GREAT ONES OF THE PAST.

MEN OF THE BRITISH SCHOOL.—No. VI.

ARCHIBALD PITCAIRNE, M.D.

AND THE MATHEMATICAL SCHOOL OF MEDICINE.

THE origin of a new system in medicine is one of those singular historical phenomena in the progress of our science to which the attention of the reader of the past is constantly being directed. We have now before us the originator of what has been called the mathematical system of medicine—the learned and in his day distinguished Archibald Pitcairne. There are some valid reasons why this man should be ranked amongst the great historical figures in the history of medicine; and there are other valid reasons why he should not. For the man did a great deal of good, and said many true things, and spoke positive proverbs in physic; and the man also did a great deal of harm. He was a horrid dogmatist, that is the short truth; and when his dogmas were right, they were so with a vengeance, and when they were wrong, they were wrong with a vengeance. Under these circumstances we at first hesitated about placing him here; but as his deeds are in some respects remarkable, and as his history affords an opportunity of showing the origin of one or two important physiological problems, we hesitate no longer.

Archibald Pitcairne was the descendant of an ancient family in the county of Fife. In the reign of James the Fourth of Scotland, the Pitcairnes distinguished themselves by their loyalty. When fat Henry the Eighth of England sent the Earl of Surrey to protect his kingdom from the invasion of the Scots, the battle of Flodden Field marked the event. James was defeated and killed, and with him there fell on that memorable day, a Pitcairne, and every male member of his devoted band. The family was thus well nigh extinguished, but the widow being *enceinte* revived the name, by being delivered soon afterwards of a son, whose paternal estates were at the time of his birth in the hands of the conquerors. In the reign of James the Fifth these lands were restored, and the Pitcairnes, retaining all their loyalty to the Stuarts, rose once more into ancestral importance. After the dissolution of many generations we find one of them residing in Edinburgh, as a merchant of great repute and a magistrate. He was married to a daughter of the Sydsefs, of East Lothian, and on Christmas-day, 1652, his lady presented him and the world with our friend Archibald.

Archibald was a hale laddie in mind and body both. He was first sent to a little school at Dalkeith. His studies here concluded, he went to the University of Edinburgh, where he passed through courses of philosophy, divinity, and civil law with great repute; but in the midst of his tasks, and of his success, his health gave way, and he was recommended to Montpellier for a change of air and residence. Travel and emancipation from the study was all that he required, and before his journey was completed he found himself fairly recovered. Staying for a time at Paris, he was anxious to follow out a course of law in the University there, but dissatisfied with the Parisian legal profession, and finding many English students of physic around him, he joined with them in their pursuits, without any more definite object than that of gaining information and of killing a little time after a pleasant and sensible fashion. He had thus become initiated into the labours of all the learned professions, and having three strings to his bow, scarcely knew which to pull first. The difficulty of choice was made greater by a recalc home, which he received from his father. Separated from his latest pursuit, he now became a friend of Gregory, the mathematician, hammered at the mathematics, and made many improvements in the then newly invented method of the infinite series, which improvements were afterwards published by Wallis. While thus occupied, and with the teachings of both Esculapius and Euclid fresh in his mind, he conceived the idea of combining the special sciences first advanced by those original masters.

Recommencing, therefore, his medical studies, he took up Botany, Pharmacy and Materia Medica in Edinburgh, and afterwards returned to Paris, where his medical education was completed, and where he made a life-long friendship

with his teacher, the distinguished Duvernay. He took his M.D. at Rheims, in 1780, and finally settling in Edinburgh, commenced practice, and published his first work, "The Solution of the Problem of Inventions."

His reputation was soon established, and his family position giving him considerable weight, he soon acquired the ultimatum of a physician's ambition, fees and fair fame. Having reached the age of forty, and his reputation being European, a signal honour awaited him; such an honour as England or Scotland, or rather both, do not expect or receive once in many ages. The senate of the then famous University of Leyden sent over an invitation, in which they expressed their hopes that the distinguished Pitcairne would accept the chair of Practice of Physic in their College, and agreed to augment the salary one-half. The doctor assented, struck away once more for the continent, and on the 26th of April, 1692, opened his first course of lectures with an oration, "Proving the profession of physic free from the tyranny of any sect of philosophers." In this introductory there is some power without much originality, and considerable freedom of opinion without any particular closeness of argument. In the present day, when good introductions are as numerous as green peas in June, and often quite as agreeable, Dr. Pitcairne's oratorical effort rather flavours of the seed sedy. But in its period of full bloom it was a precious treasure; it travelled all over Europe, it got into the provinces of England, and we not long since rescued it from the remains of a library belonging to one of those extinct Esculapians who, before any of us were born, carried in an obscure village the gold-headed cane; the buckled shoe; the nether garment with exterior quadrangular valve, and artful buttonings at the knee, all correct and proper; the wide-frilled shirt; and, the hair-curl in front, brushed up like a unicorn's horn;—who had in his medicine shop the veritable alligator stuffed of the Mantua apothecary; little ricks of wormwood and kali; pills stored in oyster shells; bottles capped with rag; lavatory soap which would base a confection; a long metal mortar made out of the town crier's defunct bell; and a choice collection of books, amongst which Pitcairne held the post of honour, having been selected in recognition of the lucidity of his arguments and his labours in optical science, to fill the place of a broken pane of glass in the rickety casement.

The oration, or introductory, is a somewhat marvellous affair, considering always that it came from a man who has been considered, not without reason, to be the founder of a new sect. It was done professedly in the spirit of opposition to sectarianism; it breathed the spirit of sectarianism essentially, but innocently. It had no plot or plan, but it abounded with dogmas, some of which were excellent in their way.

In the closer arguments of this oration Pitcairne laid down his rigid Medical system. "It is unfair," he urged, "to assert anything for truth, either in the theory or practice of physic, which stands in a degree of uncertainty such as no man would willingly have the security of his property to stand. From whence it arises, that it is not allowable to advance anything into a principle, either in the theory or the practice of physic, which the mathematicians and persons who are the least entangled with prejudice call in question."

Another rule which Pitcairne laid down, and which has the greater advantage of being practicable, is "that nothing ought to be used as a principle in physic which is not as certain as the objects of our senses; for it is but reasonable that the care for the life of man should exceed that for his curiosity."

In this discourse the author attacked, with great force and freedom, the use by Medical men of insane words as the exponents of mystical or unknown things. While keeping an eye upon the possible, he further taught, that any inquiry into physical causes is unnecessary to Physicians. Learn the act; let its mainspring alone.

The introductory over, Pitcairne commenced his professional labours in the Leyden chair. He held the office but a

very brief period; long enough, however, to receive a great many pupils who afterwards became illustrious. Among these were Mead and Boerhaave, the former of whom, as we have elsewhere shown, was his favourite pupil, and whom he deeply indoctrinated with his views. His stay at Leyden scarcely extended over a year. At that time he was recalled to Edinburgh by a love matter. He had been engaged to marry the daughter of Sir Archibald Stevenson, knight and Physician, and he returned to fulfil his engagement. This over, he intended to go back to Leyden; but the young lady and her parents wouldn't have it. Piteairne was thus divided between love and duty—love prevailed, and duty went about its business elsewhere. Poor duty! He was compensated for the sacrifice by more than love; for practice returned briskly, and he had a happy time of it.

At this period many important scientific disputes were afloat in reference to the laws of secretion and the admixture of air and blood in the lungs, during the process of respiration. The Harveian discovery of the circulation had thrown in new light, and some perplexities. Harvey's simple proposition was, that the blood made a circuitous course through the arteries into the veins, and so to the heart, round and round, again and again. He had proved, beyond all dispute, this general proposition; but, as he left almost untouched the question how the blood makes its way from the arteries into the veins, this point soon attracted the attention of the learned, and gave rise to endless theories and hypotheses. There was an hypothesis which presumed that in all parts of the body there were glands, which picked up the blood from the arteries, and transmitted it unchanged into the mouths of veins which opened within the glandular substance. By another hypothesis it was agreed that the blood was conveyed by the arteries into certain parts of the body where the arteries and veins are dispersed, with their mouths open. A third argument was, that the more minute arteries conveyed only the thinner parts of the blood, which were not to return to the heart, and that the rest or grosser part of the blood passed from the arteries into the larger veins by some imaginary system of anastomosis. Other theorists adopted the idea of a ferment. These supposed the existence of a certain native fluid or ferment in every gland, or part; which fluid is separated from the blood ascending to the texture, by a process of assimilation; and, lastly, there was a vague notion about pores of diversities of figures and of definite numbers, according to their positions. There was, in fact, the utmost mysticism and confusion; and Piteairne, feeling the absurdities of some of his contemporaries, tried, in an essay on the circulation of the blood, to put them all wrong, and himself all right, by his mathematical principles. To Willis he showed no mercy, nor to the other "impertinent triflers." His arguments were often very acute, and it is clear that he brushed away much learned rubbish. He does not seem to have had any clear idea of a capillary system, but yet with great force he argued for the general continuity of arteries and veins. "There is," he impressed, "no intermediate space between the end of an artery and the beginning of a vein, which can either be called the pores or intestines of these parts, or be reckoned as a gland, *i. e.* a space between which the mouths of the artery or vein stand directly unclosed, . . . the veins being nothing but arteries turned back towards the heart with a contrary direction."

In the main these views may be accepted. As he progressed in his argument he offered many sound ideas on the subject of secretion by glands, and on that compensation which is set up between glands, when in disease the secretion of one gland is either under or above the normal amount.

But not content with simply overthrowing the absurdities of some of his predecessors, and of arguing according to the bent of his mind on mechanical matters, Piteairne was led to enter into a contest which could not be sustained, and which, had the victory rested with him, would have made him rather a mischief-maker in science than a benefactor. In this contest he took up the cudgels against the chemical school of medicine. As he closed the essay from which we have just quoted, he added, by a tremendous assumption, the following corollary:—"From the principles here laid down, it follows, that the inspired air is not mixed with the blood in the lungs for the service of respiration."

Feeling satisfied, possibly, that this corollary was not logically deducible from the arguments he had been wielding, he

next supported it by a new production, entitled, "Of the causes of the different quantity that the blood flows with through the lungs of living creatures and embryos." The title gives the idea of a mechanical discussion, but the reading gives the fact of an anti-chemical crusade, and of nothing more. Some few chemical fancies regarding the action of mercury and guaiacum, in that day open to ridicule, having first been cleverly seized upon and ridiculed, he attacked the views of Etmuller, Bohnius, Borrellius, Mayow, and Lower, regarding the process of respiration. It is a fact in the history of chemical physiology, that to the two men last named (Mayow and Lower), both of whom were Englishmen, is due the honour of first offering any rational views on the nature of air, and of its uses to man. Lower observed that the blood changed in colour in passing from the right to the left side of the heart, and that it flowed from the arteries in a dark stream upon the closure of the trachea; phenomena which he explained by supposing that in the course of the pulmonary circuit the blood came into contact with the air, and was chemically changed. Mayow went further; he urged that there was in the air a special agent, which was absorbed by the blood in respiration, and argued that animals die upon the suppression of the respiration, because upon the want of this "salt of the air," the motion of the heart flags, the flow of blood to the brain is interrupted, and the distribution of the animal spirits, wherein the foundation of life is placed, ceases. Such views Piteairne opposed. His first grand argument against them was that the fœtus lives without respiration in the womb, while an animal out of the womb dies, although supplied with blood from a respiring animal, which blood is impregnated with a part of the air. His second argument was that the pulmonary arteries and veins are continuous tubes, and that there can be no communication between the air vesicles and the blood. He offered more arguments than these, but we need not quote them; they all had their weight in their own time, and were all powerful with him, because the whole of the phenomena observed by those whom he opposed were not explained. The possibility of air entering into combination with the blood in the lungs was never, in truth, described until Arbuthnott pointed out the fact that through a moist membrane such a communication may occur without rupture, and until Black definitely proved that in the expired air carbonic acid gas is exhaled as a product of chemical action.

Having satisfied himself by this attack on the breathing laws, Piteairne must next go from the chest to the stomach, and have a word on the digestion process. John Bohnius had argued that digestion is performed by the assistance of a digestive liquor or menstruum derived from the salivary glands, and the glands of the stomach; Piteairne, dead against such a chemical fancy, triumphantly, according to his own estimate of triumph, asked, how a dissolving or corrosive liquor, having the power to dissolve animal matter thrown into the stomach, can fail, granting its presence there, from paying the same dissolving compliment to the stomach itself, which is but flesh and blood, and of kindred nature after all. This argument was so conclusive to its author, that he would not condescend to offer any more negatives. He must go in for explanations of his own. He became, of course, mechanical again, and mathematical. The teeth break up the food, and the stomach does the same; so all the meaning of digestion is comminution. Rather an active meaning, that by mere trituration should rub flesh into chyme! Active, indeed; and so Piteairne made it out to be; for he found, by computation, strictly mathematical, that the power of the muscle of the stomach will be found equal to the weight of 12,951 pounds, a power amply sufficient for all practical comminution purposes, let alone some trifling aid from the abdominal muscles, equal to 461,219 pounds, "a power not inferior to the powers of any millstone." There seems to have been some wag of a critic, who wanted to know of Piteairne whether, after all, force were not force, be it mechanical or chemical? and whether a stomach working away at so many horse-power might not stand a chance of rubbing itself into holes, if not into a mess with the other pottage? Piteairne had a mathematical mode of replying to this, which we cannot grasp, though it is easy enough, possibly, to men of a mathematical genius.

"The Solution of the Problem of Inventions," which, as we have observed, was his first work, was sound in its precepts, and careful in its historical notices. In this essay he removed an impression, general at the time, that Hippocrates was acquainted with the circulation of the blood. He was

loud in the defence of Harvey, and here certainly carried his point.

In another work relating to the circulation in born animals and embryos, he did little more than belabour Willis. In this he succeeded: he was at home at such work.

A dissertation on the cure of fevers by evacuation must have cost him immense labour. It was all mathematical to the backbone, but the pith of it was simply, that physicians who argue that fevers are cured sooner by purges than by diaphoretics only show their ignorance.

There was also an essay, entitled, "Of the Distempers of the Eyes," where a curious question, not forgotten to this day, was mooted. In accounting for the cause of muscæ volitantes, some writers had given an explanation of the phenomenon by assuming that certain free bodies or particles float in the aqueous humour. Pitcairne tried to show, and with considerable success—for here his mathematical knowledge came into legitimate play—that it is impossible, for reasons connected with the laws of optics, that any body in the cornea, much less in the aqueous humour, can be impressed on the retina, so as to be perceptible as an object of vision. He attributed the appearances in question to a fault in the retina, such as congestion of parts of the delicate nerve screen.

A short dissertation concerning the effects of acids and alkalies in the cure of distempers, was intended to be another dose for the chemists. Vieussens, the valve man, was here the target, and got some sharp thrusts.

Passing over a treatise on "Women's Monthly Courses," which is strictly mathematical; an essay on "Lues Venerea," in which he tried to prove that this disease may arise spontaneously from an excess of humours; a treatise on the small-pox, in which venesection is recommended, and an anti-epileptic tincture is prescribed in the which pigeon's dung and dead man's skull enter as ingredients; an essay on the division of distempers, and another short snatch on the cure of small-pox, in which this pox is spoken of as if it were a tape-worm; we come to the "finis" of Dr. Pitcairne's complete works. After his death other works were published under his name, but these, including the *Elementa Medicinæ*, are all doubtful, and were published in opposition to his express wish, as notified before his death. An MS. of Pitcairne's, called the "Praxis Medica," which he would not publish, is preserved in the library of the Medical Society of London. It bears date 1692.

Returning to life-facts and memoranda, we note that in 1699 the University of Aberdeen conferred on Pitcairne the Doctor's degree; that he received the diploma of the College of Surgeons in Edinburgh in 1701, and that he was a member of the College of Physicians, Edin., from its origin in 1681.

In 1695 a book appeared, called "Apollo Mathematicus;" this was intended as a severe satire on Pitcairne; it is rather low than severe. Sir Robert Sibbald, factotum naturalist to Charles the Second, took up arms also against him. In 1696, Pitcairne, being too ill to make professional calls, amused himself in answering the knight. He never published this retort, and at last, in fear, denied having done such a thing, in toto.

He had a dislike for theologians, and in his early days wrote a comedy called "The Assembly," in criticism of the Assembly of Divines. This got him a bad name amongst the pious.

He tried his hand at Latin poetry and excelled. With one Walter Dauniston, a schoolmaster, who was no bad poet, and whom Pope mentions, he entered into competition, in turning the 104th Psalm into Latin verse. Dauniston admitted himself beaten.

His poetry has been variously estimated. One of his admirers compared him with Catullus; others have called him mystical and irregular. His best poem, perhaps, is the one entitled "Gualterus Daunistonus, ad amicos." Prior turned this into English rhyme, with great fidelity. The imitation will give some idea of Pitcairne's claim to the poet's wreath.

William Dauniston to his Friends.

"Studious the busy moments to deceive,
That flit between the eradle and the grave,
I credit what the Grecian dictates say,
And Samian sounds o'er Scythia's hills convey—
When mortal man resigns his transient breath,
The body only I give o'er to death.
The parts dissolved and broken frame I mourn,

What came from earth I see to earth return.
The immaterial part, th' ethereal soul,
Nor can change vanquish, nor can death control;
Glad, I release it from its partner's cares,
And bid good angels waft it to the stars.
Then, in the flowing bowl I drown those sighs,
Which, spite of wisdom, from our weakness rise;
The draught to the dead's memory I commend,
And offer to the now immortal friend.
But, if opposed to what my thoughts approve,
Nor Pluto's rage there be, nor pow'r of Jove,
On its dark side, if thou the prospect take,
Grant all forgot beyond black Lethe's lake:
In total death suppose the mortal lie,
No new hereafter, nor a future sky:
Yet bear thy lot content, yet cease to grieve;
Why, 'ere death comes, dost thou forbear to live?
The little time thou hast 'twixt instant now
And death's approach, is all the gods allow;
And of this little hast thou ought to spare
To sad reflection, and corroding care?
The moments past, if thou art wise, retrieve,
With pleasant memory of the bliss they gave;
The present hours in pleasant mirth employ,
And bribe the future with the hopes of joy.
The future, few or more, howe'er they be,
Were destined erst, nor can by fate's decree
Be now cut off, betwixt the grave and thee."

In his lectures he followed Bellini, whom he almost adored, whom he placed next to Harvey among great discoverers, and to whom he dedicated his works. Bellini, in his turn, dedicated to Pitcairne his "Opuscula." A curious anecdote is told, which will do for the second-sight men. In early life Pitcairne had as a friend one Robert Lindsey; these, one day reading together the tale of the Platonic Philosophers, who agreed that whoever died first should pay a spiritual visit to the survivor, entered into a similar compact. Many years after Pitcairne dreamed one morning that Lindsey came to him and said, "I am not dead, as is commonly reported, but alive, and in a very agreeable place, to which I cannot as yet carry you." By next post he heard of Lindsey's death, which occurred on the morning of the dream. The coincidence made a great impression on Pitcairne, and he wrote on the subject a mystical poem, "Ad Robertum Lindesium."

Mead in his essay on the influence of the sun and moon, relates an anecdote about Pitcairne. In February 1687, when there was a conjunction of the sun and moon, Pitcairne, says he, was in Gregory's house. He was seized with faintness during the time of the conjunction, and this was followed by epistaxis. On the following morning both he and Gregory observed that the barometer had fallen lower than they had ever before seen it. This circumstance, shall we not say coincidence, was seized on by Mead as a striking illustration of his special views as to solar and lunar influences on the human body.

Pitcairne's domestic life was free from any peculiar anxieties. He had only one child, a daughter; she married the Earl of Kelly, in 1731. In manner, he was jocular, free, engaging, and independent. He was a good orator; his benevolence was very great, and, says one of his friends, "Life sat very easy upon him in all circumstances. He despised many, but hated none. He loved his friends, and laughed at his enemies." In his locality his popularity was immense, and he numbered amongst his select friends Hecquet of Paris, Arbuthnott, Robert Gray, Mead, Boerhaave, Bellini, and many more not less distinguished men of his day. In 1713 he worked hard, so as to bring out a complete and last edition of his works under his own supervision. The task was not done to his mind, but he let the book go to press; it is from this edition that we have quoted. In the preface of this work he gives vent to the independence of his feelings.—"If Dr. Robert Grey, or Dr. John Arbuthnott, those Scots *Æsculapii*, and Herquet of Paris, that reliever of mankind, favour these dissertations, I shall not be at all concerned for the judgment of any others. For Bellini is gone to the celestials."

As sixty years came over him, Pitcairne's health began to fail. On the 20th of October, 1713, he joined, we hope, his friend Bellini. At all events he died.

We have no panegyric for Pitcairne. He was a great man with wrong notions. He was ingenious and dogmatical on the false side. But his position was peculiar. He attacked a science (chemistry), which he did not understand, in its indiscretionate or youthful period of existence. He adopted a rigid system of rules, which might have done well for making wheelbarrows, but were not expansive enough for the science of physic. He opposed sectarianism, and in so doing created a new sect. He gave a good many sound

principles of a general kind, but took the liberty of departing from them himself when he got into the heat of debate. He believed in himself, and so made others believe in him; an excellent element for success in practitioners everywhere. Did Pitcairne, after all, live to represent any principle in medicine which yet has its supporters? He did. Yet not mathematics. No, not mathematics, but hobbyism, the principle of unmitigated hard-headed hobbyism.

REPORTS

ON

THE RELATIONS OF FOOD AND DISEASE.

No. II.

ON THE CONNEXIONS AND RELATIONS OF EPIDEMIC DISEASES IN MAN AND THE LOWER ANIMALS.

Our time and space did not permit us to bring forward last week all the evidence illustrative of the connexion which subsists between Epidemics and Epizootics. We had just noticed the memorable cattle disease in 1841, and had seen how, in 1842, there was unusual distress and disease in the country, chiefly manifested in the prevalence of diarrhoea and dysentery. The epizootic constitution was so intense, that when once the disease entered a farm-yard, it spread rapidly till every ox, sheep, or pig, was infected, and in some instances it passed to the human being. Damp, wet weather appeared most favourable to its development, and, from all accounts, it seems to have arisen from atmospheric agency. (Youatt.) It is worthy of remark, also, that the cow distemper of 1841 and 1842 continued very general for seven or eight years in the county of Meath, in Ireland; and that those *cows giving milk* and confined to the house, especially where there was bad ventilation, were more subject to it than other animals. It was considered a very infectious disease, and spread rapidly. We also have abundant evidence to show that while this disease prevailed throughout England, in the vicinity of London and Liverpool especially, the deaths from diarrhoea, dysentery, and cholera were considerably above the average.

In 1843, especially in July, the fatal epidemic among cattle appeared generally throughout the country. Milk-giving cows died in some districts at the rate of forty per cent. Swine became similarly diseased, and the "purple disorder" (a severe disorder of a choleraic nature), never appears to have been entirely absent from some parts of Ireland. It was very difficult, however, to form any estimate of the loss amongst cattle from the prevailing epizootic. There was not only a desire to keep the prevalence of the disease a secret, but great numbers of cattle, appearing to be in good health at the time of their seizure with pleuro-pneumonia, were slaughtered as soon as the disease was discovered, and sold for food.

In 1844, the distemper among cattle continued to prevail; and it is in this year that we have the first notice of the peculiar characteristics of that great famine fever, and scorbutic constitution, which soon after prevailed throughout the country.

Every Physician is aware of the remarkably pestilential character of the period from 1845 to 1850; a period during which both vegetable and animal life suffered in a most unusual degree throughout Europe and America. It reached its climax in 1846, 47, 48. And no one can look into the historical records of disease already referred to, without being impressed with the great prevalence of epizootics, especially since the years 1839 and 1840. In almost every county in England, in every country on the continents of Europe and America, where diseases are recorded, the epizootics prevailed at different times and places, as if preparing the way for that peculiar and universal "pestilential constitution" which subsequently devastated the world in the form of destructive epiphytic disease, and formidable epidemics so fatal to man. It was not alone the potatoe which suffered during this "pestilential constitution," but wheat, oats, turnips, beans, onions, and tracts of country where forest-trees existed, were equally blighted. So great was the distress which resulted from this state of things in Ireland about 1847 and 1848, that the more starving of the

people fed upon the carcasses of diseased cattle, as well as upon dogs and dead horses; and it is well known how immense was the amount of mortality that subsequently prevailed. (Report on Tables of Deaths in Ireland, 1851.) There is no episode in history more melancholy than that which relates the ravages of the "pestilential constitution" in Ireland at this time; and there is no evidence of its kind more clear than that which there abounds, and which shows how intimately connected was the epidemic constitution of the period with the diseased, altered, and deficient amount of the animal and vegetable substances used as food amongst the people.

In 1845 the agricultural newspapers teemed with notices of the cattle mortality; and there seemed to be then three complaints peculiarly prevalent among the beasts, namely, the "lung disease," the "hoof disease," and the "typhous epidemic." In addition to these, however, the peculiar epidemic constitution rendered itself remarkably obvious (a phenomenon quite in keeping with the universal law of epidemics), by the impulse given to the development of those diseases whose occurrence, for some years back, had been recorded; and especially among milk cows, sheep, and pigs. About this period the "typhous" epizootic among cattle declared itself in many places, and it appears to us that the lung disease among cattle now became more complicated in its nature. In addition to that form of "pulmonary murrain" which had hitherto prevailed, and been regarded by some not as an infectious disease, there now began to be observed a "pulmonary disease" which undoubtedly was so. This pulmonary disease we regard as analogous to the typhoid pneumonia which occurs in man as a local manifestation of the dyscrasia of typhus fever. It was characterized among cattle by its tendency to produce sudden and rapid gangrene of the lung, hopeless prostration of the animal, remarkable wasting of its tissue when the animal was allowed to live, and rapid putrescence of its flesh immediately previous to and after death. This form of disease was very prevalent in Scotland in 1845, and especially in Dundee and its vicinity. In 1845 the typhus bovine plague declared itself in Germany, Bohemia, Prussia, Austria, Moravia, and Galicia. It is said to have originated in the plains of Russia, where it is now said never to be absent, and where it frequently prevails as an epidemic. It then seemed to become more highly contagious, so that, in defiance of the most strict quarantine regulation which the Austrian and Prussian states could organize, it rapidly made its way into these countries, and made great ravages among their herds. The passage of oxen from Russia into Galicia frequently propagated the disease to Moravia and Bohemia. The diseased animals, when allowed to live, presented all the symptoms which a beast can do of typhus fever; and it was even asserted by some French pathologists (Rayer) that the glands and follicles of the intestine sometimes presented the characteristic ulcerations of the typhous state; while in other instances the pulmonic complications became manifest in all the forms of a typhous pneumonia, from the engorged and softened state to the isolated products of exudation in the substance of the lung, which rapidly proceeded to gangrene, surrounded by the peculiar and characteristic red line of commencing demarcation. The fever which prevailed was of a low type, attended with great and rapid wasting of the tissues, and sometimes with diarrhoea or pulmonary symptoms. In these instances, where the cattle were allowed to live, and where recovery took place, the convalescence was slow; and even after complete recovery, the animals could not be got into condition for a long time. Scarcely any high bred cattle recovered, and the mortality from the disease was estimated at about 14 per cent. of those attacked; but, as already stated, it was difficult to strike an average, because after some time nearly all the beasts attacked were at once slaughtered; and when the disease first broke out in a place, it was so very malignant in its nature, that hardly any beasts recovered. Dundee, Perth, Forfar, and the Royal farm at Windsor, can testify to its fatal nature. Associated with these epizootics was the remarkable epidemic constitution of 1846 and 1847 especially, characterised by scurvy, fever and dysentery. Dr. Christison writes in the *Edinburgh Monthly Journal* of this period that, "The epidemic constitution, as it existed in Edinburgh and the neighbourhood during the autumn of 1846, was marked chiefly by an increase in the general mortality, by a tendency to most acute diseases, except those which are infectious, but especially by the prevalence of diarrhoea, cholera, and dysentery. About the time

this epidemic constitution established itself in the human race, an epidemic of great virulence, and which has commonly been considered to have been a pneumonia with typhoid exhaustion, prevailed extensively among milch cows, carrying off a vast number of them, as well in Edinburgh as in many other parts of Scotland," and we may add of England, Ireland and the Continent. Reports were continually being made from the various Dispensaries of Ireland, showing the fearful increase of fever, diarrhoea, and dysentery, and other diseases of the stomach and bowels. In various counties of Ireland it is also on record how prevalent were epizootics among cattle, sheep and swine, both previous to, and subsequent to the fever epidemic of 1847. In England also there was great mortality from epizootics, in Lincolnshire, Herefordshire, Leicestershire and Norfolk, and a cutaneous disease like small-pox cut off great numbers of sheep near London. We find also that diarrhoea and fever were the prevalent diseases, that typhus carried off men and women in the prime of life, that the epidemics had been more fatal in Lancashire than in London; and in Manchester, Salford and Charlton; and had greatly increased in Liverpool.

The epizootic amongst cattle was of a very virulent description, and raged with great violence amongst the cattle in Dundee, East Lothian, and Aberdeenshire; and subsequent to this we also find that "during the last fortnight in November an epidemic of rather a remarkable character broke out and prevailed in the north of Scotland, commencing in Dundee, travelling over the entire coast as far as Kinnaird's Head, and extending westerly, involved Huntly, Keith, Elgin, and Inverness. It first affected the system by pain in the throat followed by headache, sickness of the stomach, and expectoration of a dark bilious-looking substance. At Aberdeen many students suffered. At Edinburgh and Montrose the malady prevailed to an alarming extent, and schools generally became affected.

In 1848 Professor Simonds described a form of small-pox which prevailed amongst sheep in this country; and the pulmonary disease, which was thought to be on the wane in Europe, broke out with great violence among the horned cattle of Wallachia. Inspectors were appointed at the different ports to examine all cattle imported. Insurance offices were established throughout the country; and the subject of the importation of diseased cattle, and of epizootics in general, engaged the attention of Parliament during this year.

In 1848 and 1849, the epizootic of a vesicular and pustular kind was not confined to sheep, but pigs also suffered. It spread most extensively in Scotland among cattle and sheep (Dun), and the pulmonary disease continued to prevail. Subsequent to this a peculiar furunculoid epidemic began to spread in England and Scotland. It has been described by the present learned Professor of Medicine in the University of Edinburgh, then a Practitioner in York, as spreading over a great portion of England, but especially through Shropshire and Yorkshire. In Scotland it also prevailed, in the vicinity of Glasgow and the west coast generally. It consisted chiefly of boils upon different parts of the body, conjoined with an ecchymatous condition of the skin.

Such are some of the evident proofs of connexion presented to us in the history of the last half century, between epidemics and epizootics. The following general conclusions may be drawn from the statement of the facts detailed:—

1. It seems clear that the whole range of organic existence is more or less under influences of a peculiar kind, to which the "name of epidemic or pestilential constitution" has been applied, and which tend to bring about diseases or morbid phenomena, extending over large masses of men, animals, or plants, at one and the same time.

2. The nature of this pestilential constitution appears to be altogether unknown.

3. Knowing how difficult it is to define, in many cases, the analogies subsisting between the parts and functions of animals compared with man; it is, also, no less difficult to define the analogues of their morbid phenomena.

4. It is equally clear, however, as shown by the historical records of disease during the last half century, that the structure and functions of the higher animals, which so much resemble man, render them at the same time highly susceptible of diseases more or less resembling those of the human species.

5. It is no less clear, that the phenomena of the course of

epidemics and epizootics are so far similar, that those general observations regarding them, which may be called "laws," are similarly applicable to each.

6. It is also highly probable, although it cannot be rigidly demonstrated in the present state of our knowledge, that there are specific diseases of a zymotic type, of the nature of typhous fever, cholera, and others, capable of being communicated from man to animals, or from animals to man. But, while in regard to such diseases it may be said that they are mutually intercommunicable, they appear to undergo such modifications in their transference, as to render their diagnosis and identification a point of the greatest difficulty in their pathology.

7. It appears to us that typhous fevers may, however, be recognised among animals of the higher classes and also among men, as presenting nearly similar morbid phenomena, with some modifications, and apparently originating under similar conditions as regards the evils of deficient ventilation and the vicinity to animal miasms of a mixed and unwholesome kind.

8. It is also obvious that the morbid phenomena, course, and causes which give rise to diarrhoea, dysentery, and cholera are very much alike in man and in the higher animals.

9. We have also catarrhal, influenza-like, pustular, and furunculoid affections, common as concomitant and widespread diseases, both among animals and man.

10. We have also inorganic affections, such as inflammations of organs and tissues of animals in all pathological respects similar to those in man. Idiopathic pneumonia is common to those higher animals just as it is in man.

We now approach the view of a more intricate relationship which connects epidemics and epizootics than that which we have yet considered. This relationship exists in the connexion between the diseases of man, and the wholesomeness or unwholesomeness of the food on which he subsists. Knowing that man derives his food both from the animal and the vegetable world, he is exposed to the injurious effects which may result from eating the flesh of animals diseased, or of unwholesome vegetables. It is also to be remembered that the higher animals which furnish food for man are themselves vegetable feeders, and the injurious effects which may follow the use of their flesh as food may be due not alone to their flesh or fluids as injured by the existence and course of diseases in the animals themselves, but as being the medium of transmitting poisonous principles from the vegetable world, on which they feed with impunity.

In this inquiry the following questions present themselves for our consideration:—

1. What are the diseased structures; what are their characters; and of what epizootics do they come which may convey disease to the human body receiving the parts of such diseased animals as sustenance?

2. Under what circumstances does the milk of cows, of goats, or of asses, become unfit to be used as food for man?

In the absence of judiciously devised and well-directed experiments to illustrate the pernicious influence of the flesh of diseased animals used as food, we have evidence entirely of a circumstantial kind, which is not only highly significant of itself, but which leaves no doubt that the flesh of animals which are killed during the course of a disease in them, of a prevalent epizootic kind, is unfit for human food.

The circumstantial evidence to which we refer is derived from the following considerations. It is an historical fact that great numbers of the cattle labouring under the fever of peripneumonia were slaughtered, and that the meat was sold in the metropolis and in other large towns for human food.

It is also a recorded fact in the history of some of the epizootics, that dogs and carnivorous birds which were fed on the flesh of kine that died of the "murrain," sometimes died as if under the influence of a poison.

On looking over the records of epidemics and epizootics which have existed as concomitant events, the remarkable prevalence of diarrhoea, of dysentery, and of scurvy in the human population cannot fail to be remarked.

We know also how extensive is the sale of animal food in such large towns as London, and when no one officially recognises amongst these animals what number of them were healthy, and what diseased, we have information on which we can rely, that a very large amount of flesh sold as food, belongs to the carcasses of beasts which have been killed and sold for food, merely to realise their mercantile value as such before the

natural course of the disease shall terminate in death, and so diminish the chance of a successful sale. The physician who is accustomed to take a wide and comprehensive view of the origin and progress of diseases, will not fail to put a fair share of value upon such a fact, in explanation of the comparatively large amount of cases of diarrhoea which constantly prevails in England, and, more especially, in the metropolitan towns.

The more direct evidence of the pernicious influence of the flesh and visceral parts of animals used as food, and which have died or have been killed during the progress of a disease in them, we shall consider at length in our next.

REVIEWS.

The Physiological Anatomy and Physiology of Man. By ROBERT BENTLEY TODD, M.D., F.R.S., and WILLIAM BOWMAN, F.R.S. Part the Fourth. Section II. 1857.

THIS work has at length been brought to a conclusion: fourteen years having elapsed since the appearance of the first portion. The authors apologise for the long delay which has occurred in the preparation of the latter parts, and they attribute it to their professional engagements; while they pay a well-merited compliment to Dr. Beale, by whose aid they have been enabled to complete their labours. The present number embraces the subjects of Animal Heat, the Voice, Secretion, the Secreting and Ductless Glands, together with Generation, Development, and Lactation. It is almost unnecessary to state that all these subjects are treated in a free and comprehensive manner, and that all recent researches in these departments of Physiology are duly recognised and commented upon. Among the features of especial interest will be found the description of the minute structure of the liver by Dr. Beale, and of the minute structure of the kidney by Mr. Bowman; two valuable contributions to physiological science, but which have not hitherto been incorporated by their authors, in a work specially devoted to physiology. The illustrations are numerous and well executed, certain objects being represented by white figures upon a black ground; a style of engraving which in some kinds of delineation possesses many advantages.

Illustrations of the Pathology of Cancer. By JOHN ZACHARIAH LAURENCE, F.R.C.S., Surgeon to the Northern Dispensary. Small 8vo, pp. 59. London, 1856.

ALTHOUGH the term Cancer is so frequently used, no two Surgeons, we may almost say, are agreed as to the true signification of the word. Lebert and his followers seem to us to be the only pathologists who have attempted to give consistence to our views on this subject. Their position is this. There is a primary disease of the blood or system generally, the end of which is death; a disease which is known as the cancerous cachexia. This disease is accompanied or followed by the development in various parts of the body of growths having definite and (so far as it concerns their essential characters) constant anatomical elements; viz., a homogeneous transparent substance termed blastema, fibres, and cells of peculiar form and structure; i.e. cells that constitute no part of the healthy organism. Cancer is, in the opinion of these pathologists, a constitutionally malignant disease, because its almost certain result is death, even though the local affection be trifling in extent and confined to an organ unessential to life. It is often also, in common with many other growths, a locally malignant disease, inasmuch as the local affection is unable to be cured, and often leads inevitably to the death of the patient. The opinions and assertions of the disciples of the school of Lebert have been perhaps too readily received, at least they cannot be considered as proved. Mr. Laurence, in the able little treatise before us, altogether ignores the importance of the anatomical characters of growths as evidence of cancer.

The subjoined is Mr. Laurence's classification.

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|-----------------------|----------------|----------------------------|
| 1. Scirrhus, | } cancer, vul- | 7. Enchondromatous Cancer. |
| 2. Encephaloid, | | 8. Colloid Cancer. |
| 3. Melanosis. | | 9. Fibrous Cancer. |
| 4. Nævoid Cancer (?) | | 10. Fibro-plastic Cancer. |
| 5. Villous Cancer (?) | | 11. Epithelial Cancer. |
| 6. Osteoid Cancer. | | |

With reference to nævoid cancer, the author states that he

is convinced "that all the cases which have been regarded as vascular tumours running a malignant course, were really cases of encephaloid cancer, in which the vessels were developed in extraordinary number and degree." In evidence he adduces a case, observed by himself at the Middlesex Hospital, of a man, aged 61, who had had, ever since he could remember, a number of vascular tumours on different parts of his body. The man's general health was pretty good. He was free from any cancerous aspect. The cancerous nature of villous growths is, Mr. Laurence believes, in common with the majority of English pathologists, more than doubtful.

Mr. Laurence remarks, with reference to "Enchondromatous Cancer:" "This species is founded on two well-recorded cases of the most conclusive character." These two cases are, 1st, that recorded by Mr. Paget in the last volume of "The Medico-Chirurgical Transactions." The primary disease was enchondroma of the testis. The patient died, and secondary enchondromatous deposits were found in the lymphatic and vascular system, and in the lungs; and 2nd, that reported by M. Richet. The primary disease in this latter case was enchondroma of the scapula; the secondary affection, enchondroma of the lungs.

The subjoined is a novel and ingenious mode of attempting to answer the question, Is cancer hereditary? Taking phthisis to be the type of an hereditary disease, Mr. Laurence says, "The average amount of mortality in London from cancer in both sexes, from the age of 25 to 80, and from phthisis, from the age of 5 to 65, is respectively 7965 and 6040; and the ratio of the average mortality of cancer to phthisis is 1.75. Now, I contend, that if cancer is less than one-seventh as fatal as phthisis, this fact alone is sufficient to render it highly probable that cancer, as a rule, is not an hereditary disease. Any objections to this conclusion, founded on the disparity of the frequency of the two diseases, are met by the probability that if cancer, *ab origine*, was a much rarer disease than phthisis, but that both propagated themselves by hereditary transmission, after the lapse of so many centuries their numerical ratio would by this time have equalised themselves to a greater degree than is the fact."

Mr. Laurence evidently inclines to the opinion that there is some pathological relation between tubercle and cancer. "I have," he remarks, "long been struck, when listening to the melancholy tales of cancerous patients, how often one hears that some of their relatives have died of consumption. Is there any connexion between the two diseases? Are they in any way, as it were, vicarious to one another? If they were, the great rarity of their both occurring together would be at once explained. However, the materials for answering these questions are as yet too scanty and vague to allow of any positive conclusions. All I will say is, that of 51 cancerous patients who have fallen under my own observation, I find that no fewer than 14 (upwards of a fourth) knew of a parent, a brother, or a sister having died of phthisis."

The chapter on the relation of the secondary to the primary deposits of cancer possesses considerable interest. Mr. Laurence proposes to substitute the words "original" and "consecutive" for "primary" and "secondary" cancer. The following facts are adduced in support of the statement that "whenever the lungs become the nidus of consecutive cancerous deposits, they do so through the medium of the vascular system."

"For the lungs to be consecutively infected in cancer of the testis is comparatively rare; but out of eight cases which I have collected," Mr. Laurence says, "in no less than five cases (upwards of one half) the vascular system is stated to have been simultaneously infected. In five instances of vascular infection in fourteen cases of osteoid cancer, in all the lungs were so also. In a single instance out of sixteen cases of cancer of the liver, in which the lungs were affected, in that very case was the vascular system."

Our readers will remember that the Liston prize was awarded to Mr. Laurence three years since for an Essay on Cancer; this work proves that he has continued his researches in that extensive pathological field with zeal and ability. The mass of well observed and carefully recorded facts are now numerous enough, if ably analysed, to warrant some general conclusions, and we trust, therefore, some day to have from the able author of these brochures a complete, systematic, and practical treatise on this confessedly obscure and difficult subject.

GENERAL CORRESPONDENCE.

MODE OF TYING INTERNAL PILES.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the notice of the method of applying ligatures to internal piles, in the "Clinical Commentaries" of your last number, your reporter, after briefly describing the plan of applying the ligature by means of a curved needle, stated to be recommended by myself and other Surgeons, contrasts this mode unfavourably with that practised at St. Mark's Hospital, which mode he describes as possessing some important advantages over it. The following are stated to be the objections attaching to what the writer calls the old method:—1st. That it is sometimes difficult to get the ligature sufficiently deep on the base of the pile. 2nd. That the piles are often not isolated laterally, but join one with another, and thus prevent the ligature getting between them. 3rd. That by tying so thick a mass, and often also including portions of skin, much more pain is caused than is necessary.

These remarks convey an insufficient and incorrect impression of the plan of operating employed by myself. In that plan no difficulty whatever is experienced in applying the ligature to the base of the pile. Figures are given of some hooks used by Mr. Salmon, but no mention is made of the forceps (described and figured in my work on the Rectum, second edition), and often used in hospital practice, for grasping and drawing down the pile, an instrument most effectual in enabling the Surgeon to expose it, and one, in my judgment, better suited to the purpose than hooks, which are apt to lacerate the parts, and cause bleeding. The reporter also omits all notice of the recommendation which I have given, viz., "When the hæmorrhoids are large in size, a notch made with scissors on each side at the part to be girt with the ligature, just before it is tightened, will facilitate the separation without any risk of bleeding." The free division of the hypertrophied mucous membrane, which I now generally make in operating on piles, obviates both the second and third objections above stated. Undivided skin is never included in the ligature. The method here described your reporter might have witnessed in several cases recently under my care in the London Hospital.

Within the last few years a clinical record of the practice of the London Hospitals has formed an important and attractive feature in the weekly Medical Journals. Every facility has been afforded to the reporters, who have availed themselves of the opportunities within their reach with so much ability, fidelity, and pains, that these records command considerable attention, and are referred to by some of our chief writers. I cheerfully acknowledge also the courtesy and fairness with which these records have been characterised in your journal. These qualities should be carefully maintained.

I am, &c.

T. B. CURLING.

Grosvenor-street, April 21, 1857.

THE PERINEAL SUTURE.

[To the Editor of the Medical Times and Gazette.]

SIR,—I am sorry to see in your columns a letter from Dr. Savage, complaining of my having unnecessarily introduced his name in a letter which was inserted in your Journal of the 11th inst. In reply, I beg to state, that I did not introduce his name in the first instance; it was prominently put forward by the Surgeon, of whose observations I complained. I had nothing to complain of Dr. Savage, nor occasion to allude to him.

A personal intimate acquaintance of some twenty-five years was sufficient to assure that I should not do anything discourteous or unkind towards him.

I must, therefore, now decline any controversy with him; nor shall I attempt to reply to his uncalled-for and not very courteous observations.

I shall confine myself to simply repeating my assertion, that I was the first English Surgeon who publicly operated, and subsequently publicly advocated the deep perineal suture for prolapsus of the uterus, bladder, and vagina, (as described so fully in my work and in the Medical Journals,) and by such publicity and advocacy have caused the operation to become a recognised one in almost every Hospital in England,

as well as abroad; and until it be shown by the public Journals that this is not the case, I shall continue to assert my claim.

In doing so, however, I am glad to take this opportunity, as I have invariably done on every public occasion, of commending Dr. Savage for having adopted the operation for prolapsus of the uterus, etc. (not of *lacerated perineum*, as stated by him in his letters,) and thereby of having done good service to the cause of professional plastic surgery, as applied to the female organs of generation. I am, &c.

Connaught-square, April 20, 1857. I. BAKER BROWN.

ENDEMIC DISEASE IN AMERICA, FROM DISEASED MILK AND MEAT.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the editorial article upon "The Relations of Food and Disease," in your journal of this day, you ask, "Can fifty, nay twenty, well-marked instances be adduced, indicating that any disease has originated in the child, the man, or the woman, from the use of diseased milk?" And, again, "Can fifty, nay twenty, carefully-observed instances be enumerated in which, from the eating of diseased flesh, well-marked signs of any special and communicable disease has originated?"

Permit me to state, in reply to these questions, that there is an endemic disease frequently observed in many parts of the United States, especially, I believe, in the states of Alabama, Kentucky, Indiana, and Ohio, which affects both man and cattle; but the former only from eating the milk and its products, and the flesh of the latter.

The symptoms in both are alike, and correspond in degree of severity, and are such as are produced by the narcotico-acrid class of poisons.

The disease is attributed, in cattle, to something eaten or drunk by them, the nature of which has never been satisfactorily ascertained, though most diligent inquiry has frequently been made. Some suppose it to be owing to a poisonous herb, growing in certain low, marshy localities, which the cattle take as food; others suppose it to be a poisonous vine, growing in the same localities. The theory of miasma has its ardent supporters, while others, again, think that the drinking of stagnant or otherwise poisonous water is the cause. But all that is known with certainty is, that cattle feeding in certain low marshy localities are attacked with symptoms, such as are produced by the class of poisons referred to—vomiting, purging, extreme nervous agitation, etc.; and this last very marked symptom has given the popular name of "trembles" to the disease in cattle.

I believe it is only met with in cattle during the summer and autumn, and is more common and virulent some years than others, especially after an unusually hot and dry season.

Now, as to the effects upon man from eating the milk or its products, and the flesh of animals labouring under the disease. The symptoms are precisely those observed in the cattle, viz. vomiting, purging, extreme nervous agitation and prostration. Collapse and death invariably follow the ingestion of the diseased animal products, the degree of violence of the symptoms being proportioned to the amount of the poisonous principle operating in the animal at the time when the milk was drawn, or the flesh dressed for food, though no symptoms of disease had yet been manifested, and no evidence whatever existed that the poison was in operation in the animal.

Again, the animal may be so mildly attacked as to be scarcely, or not at all, noticeable when unsuspected, and to recover without betraying the disease; at the same time that the milk, butter, and cheese, spread far and wide by the avenues of trade, will sicken all who are so unfortunate as to make use of them, which has the effect to make consumers in the vicinity of such localities careful to inquire where such products came from, and by whom they were made.

But ordinarily the producer and his family are the first sufferers, and that determines the destruction of the contents of the dairy, and stops the spread of this dreadful and mysterious affection, which in man is variously named—the milk sickness, sick stomach, swamp sickness, puking fever, etc.

If the cow has a calf, it contracts the disease of its mother through the medium of the milk, and its veal causes the same results when eaten as the flesh of the mother cow.

I should be glad to give more particulars of this obscure and much dreaded disease, but I am unable to do so, not

having been in the districts where it is endemic for a number of years, not since I have made medicine a study, and I have never given the subject special attention; but, thinking it had a direct bearing upon the subject in question, and might be of interest in that connexion, I have concluded to send you this hastily prepared and imperfect account of milk sickness.

Yours, &c. J. BART. MINTURN, M.D.

Paris, April 11, 1857.

DR. FELL AND THE MIDDLESEX HOSPITAL.

[To the Editor of the Medical Times and Gazette.]

SIR,—Without attaching more importance than it deserves to an elaborate puff in the *Observer*, of Dr. Fell's treatment of cancer in the Middlesex Hospital, I think it right to state that while Dr. Fell, as I believe, denies all connexion with it, or knowledge of its authorship, but one feeling of annoyance and strong disapprobation prevails regarding it, among those officially connected with the Hospital.

I am, &c.

Grosvenor-street, April 22nd, 1857. A. P. STEWART.

DR. MARSHALL HALL'S METHOD OF ARTIFICIAL RESPIRATION.

[To the Editor of the Medical Times and Gazette.]

SIR,—I shall be obliged if you will allow me to state, that I believe Dr. Marshall Hall's method of artificial respiration was quite efficient as a method of artificial respiration, in the case of death during the inhalation of amylene, which I related in the last number of the *Medical Times and Gazette*. That it was not efficient in restoring the patient is not to be wondered at, when his own natural respiration, continued for several minutes, had failed to restore the action of the heart. The artificial respiration was resorted to for want of anything else which could afford a chance of benefit. I asked Mr. Ferguson's advice respecting the propriety of opening the jugular vein, with a view to relieve the probable distension of the right cavities of the heart, but as the veins of the neck were shrunk, and did not contain any blood, he did not think it would be of any use to open them. In Mr. Paget's recent case of death during the inhalation of chloroform, the patient continued to breathe after the pulse had ceased, and the artificial respiration was not effectual in restoring him.

When the failure of the pulse is the consequence of the absence of breathing, as in drowning, artificial respiration is the proper remedy, and I believe the method of Dr. Marshall Hall to be a very efficient one. I had a few days ago the opportunity of seeing its good effects on a child born in a state of partial asphyxia. The child presented by the shoulder, but was easily turned by Mr. Edward Tegart while the mother was under the influence of chloroform. Being a large child, however, the circulation between it and the placenta was interrupted for a short time during the passage of the head, and when born, although there was a slow pulsation in the funis, it breathed only by distant gasps, its muscles were completely relaxed, and it was so insensible that dashing cold water on it had no effect on the respiration. The gasping was becoming less frequent and the pulse was failing, when Mr. Tegart and I began Dr. Hall's method. I could hear the air entering the larynx at every turn of the child. Its own inspirations soon became more frequent, it became of a florid colour, in place of the livid one it had previously presented; its muscles began to be tense and active, and in a very short time it was crying vigorously. I believe that inflation of the lungs from mouth to mouth might have restored this child, but, according to my experience, not with the same promptitude.

In any case of accident from chloroform or any other narcotic vapour, if the respiration were suspended by the overaction of the medicine on the brain, and the heart were not entirely paralysed, artificial respiration would, I believe, restore the patient. Such is the result of my experiments on animals; but where the heart itself is the organ chiefly or solely affected, artificial respiration, although affording a chance of benefit, is likely to be of little avail; and these apparently are the cases of accident which have ended fatally, notwithstanding prompt assistance.

I am, &c.

18, Sackville-street, April, 1857. JOHN SNOW, M.D.

PRETUBERCULAR STAGE OF PHTHISIS.

[To the Editor of the Medical Times and Gazette.]

SIR,—The controversy between Dr. Markham and myself is limited to the smallest point, viz., whether the case which he narrated at the Pathological Society does or does not oppose the theory of a pretubercular stage of phthisis. He affirms that it does, and his grounds are, that although a careful stethoscopic examination of the case was made seventeen hours before death, nothing abnormal was discovered; and yet after death, according to his abstract published by you on March 28, "Miliary tubercles were found thickly scattered through every tube [lobe] of each lung;" and according to his detailed account of the case in the *British Medical Journal* of April 4, "There was not a single portion of any lobe of either lung which was not studded with miliary tubercles." Hence there was extensive deposition of tubercle, but it was not discovered, and therefore we must not affirm the absence of tubercle from the absence of physical signs. That is the argument.

I venture to ask, first,—If the tubercle ought not to have been discovered? Dr. Theophilus Thompson, who is Physician to the Hospital for Consumption, and must through a long professional life have seen as many of such cases as the most favoured men, expressed his surprise that so much tubercle should have existed without physical signs of its presence; and Dr. Quain was in a state of consternation, according to the report of a cotemporary, in reference to the same fact; and, moreover, I am informed that the whole Society joined in a similar feeling.

But, secondly, I ask,—If tubercle was not diagnosed in this very case. This does not appear from the abstracts of the communication, but it is distinctly so stated by Dr. Markham himself in the detailed statement of the case in the *British Medical Journal* of April 4. Indeed so extensive did he believe the deposit to be, and so much importance did he attach to it, that he actually diagnosed disease of the heart by the physical signs resulting from this deposit. He states:—"Taking into consideration the general condition of the child, the peculiar situation of the bruit, (viz. to the left of the upper part of the sternum,) the absence of all symptoms of cardiac disease, and the possible presence of a left clavicular dull percussion sound, I formed the diagnosis that the child was suffering from tubercular disease of the lungs, though at the same time, on account of the absence of other signs and symptoms of pulmonary disease, I placed a query by the side of the diagnosis entered on the paper." The child had then been ill three weeks, and was "falling away;" and this diagnosis was made thirteen days before the death, an event which was preceded by "some serious mischief" which "had fallen on the brain."

Am I not justified in stating that the tubercular deposition ought to have been, and was diagnosed in this case, and that by the same observer who has stated that "this case proves that the absence of physical signs is no proof of the absence of tubercle in the lungs, and therefore condemns such terms as *pretubercular* stages of phthisis as unwarrantable and hypothetical." (*Medical Times and Gazette*, March 28.)

I am, &c.

EDWARD SMITH.

63, Grosvenor-street, W., April 18, 1857.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 14, 1857.

Dr. BUDD, Vice-President, in the chair.

ON THE EFFECT PRODUCED ON THE CIRCULATION BY THE LONG-CONTINUED ACTION OF COLD WATER EXTERNALLY.

By H. BENCE JONES, M.D., F.R.S., Physician to St. George's Hospital; and W. HOWSHIP DICKINSON, Esq., Caius College, Cambridge.

Opportunities of making use of some douche and shower-baths of more than ordinary potency having presented themselves, the following experiments were undertaken, with a

view of removing some of the uncertainty which now prevails regarding the effects of the outward application of cold water. These experiments are divided into three sections:—1st, on the general effect of the douche or shower-bath; 2ndly, on the effect of the shower-bath at different temperatures; 3rdly, on the effect of the shower-bath in different circumstances.

SECTION 1.—The first experiment was made by a douche-bath, by which 225 gallons of water were allowed to fall upon the head for a quarter of an hour. By this the pulse was greatly relaxed in frequency and power, and it became irregular; at one period of the experiment the reduction amounted to 30 beats in the minute. The second experiment was made with a shower-bath delivering about 20 gallons of water a minute—upwards of 300 gallons in fifteen minutes. The results were similar to those obtained with the douche-bath, but were more marked. During the second minute, the pulse was found to be less frequent by 40 beats than it had been previous to the fall of water; and from the fifth minute to the fifteenth, when the experimenting terminated, it was observed to be frequently intermitting and very weak. The third experiment was made with a still more powerful shower-bath, at Vienna. This delivered nearly 38 gallons of water a minute—upwards of 550 gallons in fifteen minutes; but the openings in the rose were very fine, and the shower was much spread. In the fourth minute the pulse was found to be imperceptible, and during the remainder of the quarter of an hour for which the bath was continued, it was feeble and irregular. Afterwards the pulse was observed to be smaller and rather slower than it had been previously, but it was immediately restored by a warm-bath. Thus it seems that a strong douche or shower-bath produces an excessive immediate effect upon the pulse. By the first shock it may be reduced in rate even 50 beats in the minute; it then recovers a little, but after four or five minutes, when the shivering commences, it again becomes reduced, and often is rendered quite imperceptible.

SECTION 2.—The experiments in this section were made for the purpose of showing whether the effect varied with the temperature of the water. The most interesting are two which were made with the powerful shower-bath alluded to in Section 1, second experiment. In the first, the water was at 70° Fahr. The pulse did not fall in rate for three minutes, although it lost much in strength and volume. When shivering commenced, at the end of the fourth minute, the pulse was imperceptible, and it was scarcely to be felt until the end of the sixth, and it remained weak and irregular until the termination of the experiment at the end of the tenth minute. In the second experiment the water was iced down to 50° Fahr. The effect was much more rapid. During the first fifteen seconds the pulse was reduced at the rate of 38 beats per minute; this was followed by a reaction better marked than before, and the annihilation of the pulse, which followed the commencement of shivering, was much more complete and of longer duration.

SECTION 3.—Some of the effects observed to follow the use of the shower-bath, taken under varying circumstances, are here stated. Two experiments were made: one at the baths at Ischel, in Austria, and one at the Prussian bath, at Vienna, where cold shower-baths were alternated with very hot vapour-baths. It was found that the increased action of the pulse produced by the exposure of the body to hot steam prevented that depression which would otherwise have resulted from the cold water. A converse experiment is quoted from Dr. Currie's "Medical Reports." An ague patient, who had derived advantage from the cold effusion during the hot stage of the fit, nearly died from the alarming depression which resulted from the same application while he was in the cold stage.

The general conclusions are—

1. The usual effect of a strong douche or shower-bath is the immediate depression of the pulse. By the first shock of water between 64° and 68° Fahr. the pulse becomes weak and irregular, and may be reduced in rate even fifty beats in the minute. After the first shock the pulse recovers a little, but remains weak until the secondary effect or shivering comes on, when it becomes weaker and intermitting, and may be quite imperceptible. After ten to fifteen minutes the pulse remains very small and weak, and shivering continues whilst the experiment lasts.

2. If the shower-bath is a small one (eight gallons), and the person taking it in good health, no great difference is perceived in the pulse whether the water is hot (110°) or warm (74° Fahr.) If the water is very cold (47° Fahr.) the pulse becomes smaller, but the rate is not affected.

With a shower-bath giving twenty gallons per minute a difference of twenty degrees (from 70° to 50° Fahr.) causes a great difference in the shock. The difference in the after-effect, or shivering, is not so marked. The depression of the pulse when the shivering comes on is more continuous with the colder water, and is more manifest up to the end of the experiment.

3. When the pulse is raised above, or depressed below, its healthy standard, the shower-bath or douche produces very much less or a much greater effect than would be produced by the bath under ordinary circumstances.

As it seemed possible that a part of the reduction of the pulse might be due to the action of the cold water upon the capillaries and the radial artery in which the pulse was felt, a set of experiments were made in which the forearm and hand were exposed to temperatures varying from 25° to 124° Fahr. The results of these experiments may be thus stated:—

1st. When one arm is in water at 50° and the other in air 46° Fahr., no difference in the pulse is observed in fifteen minutes.

2nd. When one arm is in water at 110° and the other in air at 46° Fahr., little if any difference could be felt in the same time.

3rd. When one arm is in water at 44° and the other in air at 107° Fahr., there was the same result in the same time.

4th. Even one arm at 33° and the other at 112° gave no result.

5th. Still lower and higher temperatures, 25° and 115° Fahr., did not give any decided result in fifteen minutes.

6th. The douche-bath on the arm and hand, at 42°, produced no greater effect on the pulse than still water at 44° Fahr.

Hence, generally, it follows, that no part of the effect produced by the shower-bath on the pulse depends on the action of the water on the hand and forearm in which the pulse is felt.

The CHAIRMAN asked if Dr. Bence Jones had tried any experiments as to the value of long-continued shower-baths as a remedy. He (the Chairman) had often found them of great potency in spasmodic disorders.

Dr. BENICE JONES said he had not made any experiments of the kind alluded to. The ordinary shower-bath in St. George's Hospital, used in chorea and hysterical cases, was of eight seconds' duration. His object in the experiments detailed was simply to ascertain the physiological effect upon the system of the long-continued application of the shower-bath. The effect was just what might have been expected, corresponding exactly with what took place in ordinary bathing. One interesting point connected with the experiments was the difference of sensation produced by water at different temperatures, the pain being less with the lower temperature than with the higher. The skin was no doubt a bad conductor of heat, as of electricity, so that when a warm hand was put into cold water it did not lose its heat so fast as might be expected.

Dr. WEBSTER asked whether death did not frequently occur after the use of the Russian baths. He believed that an ukase of the present Emperor prohibited their indiscriminate use. According to the Russian system the body was first parboiled and then frozen. He (Dr. Webster) had recently found that the douche-baths, *bains d'effusion*, and other baths, formerly in repute on the continent, were much less in vogue now than formerly.

Dr. BENICE JONES said that any person might avail himself of the Russian baths at Vienna, and no danger appeared to be apprehended from their use. He had observed that many of the persons employing them were rheumatic.

Dr. E. SMITH asked whether Dr. Jones had ascertained that the effect of prolonged exposure to cold water was the same in the slipper-bath as in the shower-bath. After sitting 26 minutes in cold water he found the pulse reduced from 84 to 66. The respiration was increased somewhat in rapidity, but chiefly in depth, the quantity of air breathed per minute being increased from 500 to 850 cubic inches. The high rate of pulsation before taking the bath, in some of the cases mentioned by the author, was no doubt attributable to mental excitement at the moment, and could hardly be taken into account when determining the effect of the cold water.

Mr. BROOKE mentioned that on one occasion when swimming in the sea with a friend for 55 minutes, they both found themselves exceedingly depressed, but not from fatigue in swimming, and his own pulse was considerably reduced. The temperature of the water was 65 or 66.

Dr. BENCE JONES said it was very difficult to make observations with the thermometer in the shower-bath.

A paper on

DIETETIC MEDICINE,

by Dr. Isaac Pidduck, was then read:—

The author pointed out that in order that all the tissues of the body may be perfectly formed and duly nourished, proper materials must be furnished. These are found in the milk in infancy, in mixed diet in after life. For the bony structures, the phosphate, fluato and carbonate of lime must be adequately supplied. The refinements of civilized life have deprived the wheaten flour of the bran, which contains the largest proportion of this ingredient. He detailed his experience at a school, where of 108 children, 12 were scrofulous, and 25 had spinal curvature. In 4 cases the bend was in a forward direction in the lower part of the column, and all had incontinence of urine. It is his belief that curvature in this direction is a frequent cause of this malady, and in treating the general health 3 out of 4 got well, the remaining case being much ameliorated. His treatment consisted in preparing gingerbread nuts with phosphate of lime and saccharine carbonate of iron, one of which was given three times a day. The phosphate was obtained from ivory turnings, deprived of gelatine by long boiling. This alimentary method he believes quite sufficient for the cure of spinal curvature without the employment of any mechanical contrivance.

The CHAIRMAN said it was no doubt true that persons often had a craving for the particular substances required by their system in certain ailments; as patients suffering from scurvy were said to long for green vegetables. This peculiarity extended to animals; for he had observed laying hens, in districts where there was but little lime, fighting for the egg shells thrown into the farm-yard, in order to obtain materials for the shell of the new egg.

The Society then adjourned.

ARMY MEDICAL AND SURGICAL SOCIETY.

FEBRUARY 7.

(Concluded from page 375.)

Mr. MATTHEWS alluded to his experience at the Balaklava Hospital, and stated that he thought a review of the whole series of cases of depressed fracture of the head, which had passed through his hands, of which Dr. Jephson had related some, did not place the operation of trephining in so successful a light as might be inferred from the paper just read. Out of twenty-three cases received for treatment, there had been fourteen recoveries; and of these fourteen recoveries, six only had any operation performed for the forcible elevation of depressed bone, while in eight, no operative interference had been required; seven had died, of whom six had been operated on, and one had not. Of the six recoveries operated on, three had been inflicted by shell, one by musket-ball, and in two the nature of the missile was unknown. The general success of operative proceedings in the army was not even so great as this, and he attributed the want of success in many instances to the injury primarily inflicted on the brain. He considered that the post-mortem appearances in many cases demonstrated that this had taken place to such an extent as to preclude all hope of recovery, and that the operation was not fairly chargeable with the want of success in such cases. He differed from Dr. Jephson, who seemed to infer that all cases of gunshot depressed fracture should be at once trephined, or the bone otherwise elevated, and thought we might, in cases of slight depression, wait till symptoms came on.

Mr. LAING alluded to the case which had been mentioned by Dr. Jephson, where the patient had been trephined at Scutari. The fact was that the patient had been wounded by a fragment of shell at Balaklava, and was doing well at first, when symptoms of irritation and compression of the brain supervened, and there being a distinct depression at the seat of injury, trephining was resorted to, but without relieving the symptoms. Post-mortem examination revealed a contre coup, a fracture through the sphenoid, with inflammation and effusion of pus on the surface of the brain, extending from

this point. The officer had, unfortunately for himself, been doing so well, that he had not sufficiently attended to the rest and regimen so necessary in these cases; trephining, therefore, at an earlier period would have been useless, and was only resorted to as an extreme measure; and with reference to the use of the trephine, he could not but think that where a depressed portion of bone is pressing on, and must irritate the brain, an operation is admissible. Mr. Laing alluded to a case in Canada, where a wound had been inflicted by the back of an axe, and depressed an angular portion of bone; this was removed, and he thought most judiciously, as the man recovered without a bad symptom, and for four years afterwards continued well. He thought, however, that these cases of depressed fracture which recovered ought not, as yet, to be looked upon as thorough recoveries, but should be watched closely for years after.

Mr. BLENKINS had seen several of these cases, and thought that all present would agree as to the value of the interesting series of cases which had been submitted to the notice of the Society, and he was of opinion that they would assist in clearing up some doubtful points of treatment regarding these severe injuries. He agreed with much that had been advanced by the author, but the question which he principally mooted was, as to the utility of the trephine in depressed fracture, and the period for resorting to it, points upon which there was considerable discrepancy of opinion in different surgical works. A very large proportion of the cases detailed were followed by protrusion, a more frequent occurrence than was usually described. It would have been very desirable, he thought, to have had an account of the condition of the liver in these cases, which were followed by jaundice, as it had been stated that abscess of the liver followed injuries of the head in a more peculiar manner than other injuries of the body. Three cases of compound fracture of the skull with depression had come under his notice, which did perfectly well, and the men were subsequently able to perform their duties in the ranks. He had availed himself of the opportunity to display to the meeting the crania of two unsuccessful cases, in one of which the skull was extensively fractured in the frontal region, with depression, but the symptoms of depression were very slight for many days after the injury. The patient eventually succumbed to slow meningeal inflammation. The other was a case which might be termed "contre coup," yet it was not really so, as there was fracture at the seat of the blow, as well as on the opposite side of the skull, though they did not communicate. He agreed with Mr. Matthews that the result of these cases depended more on the concurrent injury to the brain and its membranes, than on the mere fracture of the bone.

Mr. WYATT could not refrain from alluding to certain points connected with the discussion of such an interesting subject, which had been so ably handled by the author; and, although he felt much gratified that the details had been so clearly stated, yet, as regards the Medical treatment employed, he must, even in the absence of the author, be allowed to express an opinion in opposition to the indiscriminate employment of mercury, which appeared to have been so constantly employed, and in several cases, almost, he thought, without reference to symptoms indicative of its use. He could not too forcibly express his dissent to that too-prevailing doctrine, which would prescribe the internal exhibition of mercury in all cases of concussion of the brain, often as soon as the collapse attending it had subsided; he thought in this, as in many other cases of injury to important organs, we might derive much satisfactory information, and indications for correct practice, by observing what occurred in concussion (with or without effusion of blood) in the eye. He reprobated that too-prevailing practice of too hastily resorting to so powerful a remedy for good or evil as mercury; and he was confirmed in that opinion, which was first formed during the period he was attached to the London Hospital, by the results of his subsequent experience in the Army. Another important question had also been raised by the author of the paper (and which, he believed, was still a disputed one), as to which was the best practice to be pursued in those cases of protruded cerebral matter, which so frequently followed the use of the trephine; whether the mass should be treated by compression, or sliced off; and considering the very delicate structure of the organ, and its intense sensitiveness when inflamed, he was of opinion that slicing off any of the protruded contents was preferable to adding to the risk of com-

pression of the intracranial contents by any attempt at pressure from without; and he thought that the results of experience in civil practice would corroborate his views; and as Mr. Curling, one of the Surgeons of the London Hospital, was present, he hoped that the Society would have the benefit of his extensive experience in such cases.

Mr. CURLING remarked, that although in his early experience it was the common practice to give mercury freely in injuries of the head, even before the occurrence of inflammatory symptoms, he had long questioned its efficacy, and in later years he had only resorted to it in very moderate doses, if at all. With reference to the treatment of fungus of the brain, he had been much interested in the pathological details of several of the fatal cases related by the author of the paper, as they fully confirmed what he had himself observed, that, in most instances, the fungus was consequent upon the formation of an abscess in the brain. In such a condition compression must be injurious, and he thought it was quite sufficient to give support to the protruded part. He could see no objection to slicing off the fungus, a practice which had been resorted to with success in one of the cases mentioned; and he believed that the fungus consisted generally not so much of brain tissue, as of exuded lymph. He fully coincided with the observations of Mr. Matthews, that the result depended chiefly on the injury inflicted on the brain; the extent of the fracture and degree of depression were of less importance than the state of the brain. He contrasted the cases occurring in civil Hospitals with those met with in military practice; and he considered that Mr. Guthrie was right in stating that the propriety of using the trephine depended upon the degree of depression; and that where this was great, although no symptoms existed at the time of the injury, mischief might arise after from the depressed bone. He was surprised to find, from the cases related, that the ball rarely penetrated the brain, and that it either glanced off the skull, or was arrested in its course by the bone. Only one case had been mentioned where the ball had lodged in the brain.

M. DE CHAUMONT alluded to a case of gun-shot injury of the skull, which had occurred in the Regimental Hospital of the Rifle Brigade, and for the treatment of which calomel was employed.

SIR JOHN HALL alluded to a case which had occurred in the 33rd regiment, where the trephine had been applied over the longitudinal sinus with a successful result. The injury was caused by a stone, which was wantonly thrown from a considerable elevation, and striking the man on the vertex of the head, fractured his skull extensively. The injury was inflicted about 9 o'clock at night, and about 2 o'clock a.m. he was brought to the Regimental Hospital in a state of insensibility, and a large ragged wound existed over the posterior superior part of the right parietal bone, with considerable depression. The symptoms were so urgent that an immediate operation was necessary, and was performed. On dividing the integuments and pericranium, it was found that the edge of the fractured portion of bone had been driven into the longitudinal sinus, and there was a great loss of venous blood. The bleeding was easily restrained by a dossil of lint, and a portion of bone on the opposite side, including the other half of the sulcus of the longitudinal sinus, was removed by the crown of the trephine; but on elevating the depressed portion of bone from the sinus, the rush of blood was so alarming as to cause the operation to be arrested, before the whole of the depressed portion of bone, (which was an inch and a half in diameter) was elevated. A dossil of lint was placed over the opening into the sinus, and the flaps of the integuments laid down over it, which were surrounded by a light compress and bandage: this restrained the hæmorrhage, and in the course of twelve hours the lint was removed from under the integuments, and the opening into the sinus was found to be plugged up with adhesive matter, and no further hæmorrhage occurred; but violent inflammation of the brain ensued, accompanied by fierce delirium, spasmodic action of the muscles of one side of the body, and paralysis of those on the opposite side. Strabismus, and relaxation of the sphincters, with almost every other alarming symptom which a man could have and recover from, occurred; and he was sent to England as an invalid in January. During the inflammatory stage, strict antiphlogistic measures were adopted, and although the man had lost so much blood previously, it was found necessary to bleed him from the arm several times, and to apply leeches frequently. When he regained consciousness he was affected

with distorted vision, but as he gained strength this symptom disappeared, and when he embarked for England, in January, all he complained of was a noise in his ears, and dizziness when he stooped down. The chief points of interest in this case were, that the trephine may be safely applied over a sinus, and that where much injury has not been inflicted on the brain itself, recovery may ensue.

Mr. CRITCHETT remarked, that the very interesting group of cases which had been now brought before the notice of the Society suggested some important points for discussion, and the first question which suggested itself was, with reference to the period at which trephining should be employed, and he could not help thinking that some of the cases would have presented a more favourable result, if an exploratory operation had been performed, and the irritating spiculae of bone removed, before cerebral symptoms manifested themselves. He considered that the brain would suffer in a large majority of cases, sooner or later, from the presence of a depressed portion of bone, and would therefore advise its removal if it could be clearly diagnosed, even where cerebral symptom had not occurred. And as regards the after treatment of these cases, it may be premised that the post-mortem examinations uniformly displayed abscess in the substance of the brain; and this circumstance appeared to him to contra-indicate the exhibition of calomel; which, in his opinion, possessed no influence over suppurative inflammation, and would be likely to interfere injuriously with the reparative process after the operation. All the cases of trephining which had come under his observation, and had recovered, had not taken mercury; he much doubted its curative power in traumatic inflammations, and more especially in those of the brain. Fungus cerebri appeared to have been of frequent occurrence in the cases adduced, and he believed that these protrusions depended usually upon the formation of an abscess, and were composed chiefly of plastic exudation mixed with brain matter; he was in favour of removing these excrescences, in preference to the employment of pressure.

Mr. LAING wished to remark, in reply to Mr. Wyatt's observations, that of four cases of fractured crania, three had recovered without the use of mercury; and amongst them was an officer, who received a fracture from a sabre-cut at Balaklava, and who was treated on the dietetic and expectant plan.

Mr. BAKER alluded to the case of a young officer in the Crimea, who had received a severe concussion of the brain from a fall, and in the subsequent treatment of whom, great benefit had ensued upon the exhibition of calomel.

Mr. MOUTAT stated the result of two severe cases of sabre wounds of the head, without injury to the brain, which had come under his notice at the cavalry charge of Balaklava. The patients were officers, and perfect recovery was the result in both cases. On referring to the returns of wounded in the Crimea, they exhibited relatively a small proportion of these injuries, the total being 79 only, and of this number, 18 recovered; this, he considered, could be easily understood, for the organs contained in the bony cavity of the cranium being so essential to life, a very large proportion were necessarily mortal. Mr. Matthews had mentioned the numbers which recovered with and without operations, the result being in favour of the latter; and in this conclusion Mr. Moutat quite agreed, as far as his experience went; in fact, he believed that operative interference, except for the relief of urgent symptoms, was rarely justifiable; a large proportion of cases would die whether the trephine was employed or desisted from. The French, Russians, and he believed the German Army Surgeons rarely trephined, while in the English army it would appear to be a favourite proceeding; and he was of opinion that the correct line of practice would be found between these two extremes. The post-mortem examinations in almost all these cases revealed inflammation of the brain and its membranes, with abscess; and he thought that the inference to be drawn from this pathological fact would be in favour of early depletion, a practice which had not been much resorted to, from the depressed condition of the men, and the great liability to pyæmia, which Stromeyer had shown to be one of the most fatal and common terminations in all injuries of bone; and there was no proof that the cranial bones, when injured, were an exception.

The PRESIDENT considered that the Society was much indebted to the author of the paper for the careful and interesting way in which he had brought the subject forward; elucidated as it was by so many valuable morbid preparations. The meeting was then adjourned.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 17th inst. :—

BRAYTON, JONATHAN, Whitehaven, Cumberland.
FOSTER, WILLIAM FREDERIC, Hambledon, Hants.
FOWLE, WILLIAM HENRY, Nuneaton, Warwickshire.
GARDINER, GIDEON GEORGE, Chalford, Gloucestershire.
GOULD, WILLIAM, Denton, near Manchester.
HART, ADOLPHUS DANIEL, Brook-street, Hanover-square.
LAWSON, JOHN EDWARD SPENCE, Egremont, Cumberland.
MACAULEY, THOMAS, Leicester.
MAYNARD, JOHN CLARKSON MARTIN, Hudson's Bay Company.

NEWMAN, AUGUSTUS, Oxford.
PRENTIS, CHARLES, Phillimore-place, Kensington.
THORNELEY, JOSEPH, Heaton Mersey, Lancashire.
WILKINSON, JOHN, Hunmanby, Yorkshire.

The following gentlemen were admitted members on the 20th inst. :—

COOPER, A., Plymouth.
GRAY, J. T., Hexham.
HOOKER, E. M. C., Sheerness.
HUMPHREYS, J., Royal Navy.
JONES, J. E., Dolgelly, Merionethshire.
PRALL, S., Rochester.
TEEVAN, J., Killeshandra, County Cavan.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise, on April 16th, 1857.

DICKENS, WILLIAM ACHERLEY PARKES, Wem, Salop.
GAMES, JOHN, Liverpool.
GILROY, JOHN, County Cavan.
LYNES, WILLIAM, Coventry.
PAULL, FREDERIC, Edinburgh.
SEPHTON, RICHARD, Wigan.
UTLEY, BARKER, Spofforth.

UNIVERSITY AND KING'S COLLEGE, ABERDEEN.—The following gentlemen had the Degree of M.D. conferred on them, April 16th :—

BARTON, GEORGE KINGSTON, Waterford.
BLAKE, FREDERICK WILLIAM, R.N.
CADDY, JOHN TURNER, R.N.
CORTIS, WILLIAM SMITHSON, Fife.
DOYLE, MICHAEL, Dublin.
DUIGAN, DANIEL JOHN, R.N.
KIRBY, EDMUND ADOLPHUS, London.
LIGERTWOOD, WILLIAM, Aberdeen.
McMANUS, JAMES HENRY, Ballymahon.

DEATHS.

BICKERSTETH, ROBERT, ESQ.—Liverpool has lost an eminent surgeon and a truly good man, Mr. Robert Bickersteth, brother of the late Lord Langdale, and Rev. Edward Bickersteth, and uncle of the Bishop of Ripon. He died on the 17th. He was born at Kirkby Lonsdale in 1787. His father was a medical man there, in extensive practice, and greatly respected. At the age of twenty-three, Mr. R. Bickersteth was elected surgeon to the Liverpool Infirmary, which appointment he held for forty years. He was then appointed consulting surgeon, which office he retained till death. Throughout his professional career, Mr. Bickersteth was in the habit of seeing poor people gratuitously every morning. He was thus occupied for nearly two hours daily, and in this manner gave the benefit of his experience to several thousand persons. His kindness was as much displayed towards them as towards his private patients. He took a lively interest in everything connected with his profession, and was a member from the first of the Medical Institution, British Medical Association, &c. Although almost overwhelmed with work, he presided, when asked, at meetings connected with the interests of medical science. His disinterestedness and uprightness were so conspicuous that he gained the confidence and respect of every medical man. Mr. Bickersteth did not confine his attention to his profession. Anything for the benefit, moral or religious,

of his fellow-creatures, sincerely interested him. He was a liberal supporter of the many charities of the town, and of its educational institutions, and schemes connected with the comfort and health of the poor. M.R.C.S., Eng. 1806; F.R.C.S., (Hon.) 1843; Cons. Surg. to the Liverpool Royal Infirmary.

APPOINTMENTS.

Dr. W. O. Priestley has been elected, after a sharp contest, Honorary Physician Accoucheur to the St. Marylebone Infirmary, vacant by the resignation of Dr. Robert Lee.

Dr. George Johnson has been appointed Professor of Materia Medica and Therapeutics at King's College. This appointment has been received with satisfaction by all but unsuccessful competitors.

TESTIMONIALS.

A beautiful diamond ring has been presented by the Arch-Duke Maximilian, Commander-in-chief of the Austrian navy, to Dr. Barry, Deputy Inspector-General of Hospitals at Corfu, for his attention and humanity to a seaman of the Austrian navy, who, having sustained serious injuries while engaged in firing a salute, was admitted into the military hospital at Corfu.

TESTIMONIAL TO WILLIAM DEAN FAIRLESS, ESQ., M.D.—Last week a meeting of the inhabitants of Crieff and vicinity was held in the Masons' Hall, for the purpose of presenting a testimonial of their esteem to William Dean Fairless, Esq., M.D., on the occasion of his leaving Crieff to reside in his native town, Hexham, Northumberland. The testimonial consisted of massive silver coffee-pot, tea-pot, sugar-basin, and cream-ewer. Each article bore the following inscription :—"Presented to William Dean Fairless, Esq., M.D., on his leaving for England, by his friends in Crieff and neighbourhood, in token of their appreciation of his private worth and public services.—Crieff, April, 1857."

PRESENTATION OF PLATE TO MR. HAFFENDEN, SURGEON, OF HANWELL.—On Friday the 20th ult., an elegant and massive silver salver was given to Thomas Haffenden, Esq., by the inhabitants of Hanwell and Greenford. The salver bears the following inscription :—"Presented to Thomas Haffenden, Esq., by many of the poor and other inhabitants of Hanwell and Greenford, in token of their esteem and regard for the manner in which he discharged the duties of Medical Officer for nearly thirty years. March, 1857." It was presented by Sir A. Y. Spearman, Bart., who presided on the occasion. This gentleman, in an eloquent speech, highly complimented Mr. Haffenden on receiving such a well-merited token of the esteem and respect of his neighbours, particularly the poorer class. A very flattering address was then read by the Rev. Charles Clarke, M.A., rector of the parish, to which the signatures of between two and three hundred of the inhabitants were attached. An elegant smelling-bottle was at the same time presented to Mrs. Haffenden, as a memorial of the day.

THE SANDS COX TESTIMONIAL.—The following letter has been received by the Mayor of Birmingham. It adds another to the numerous examples of the unselfish manner in which Mr. Cox labours for the good of the town of Birmingham. "Temple-row, Birmingham, April 3.—My dear Sir,—I am desirous of addressing through you a few lines of grateful acknowledgment to the Committee which has been so unexpectedly formed for offering me a 'public testimonial.' No man can be more deeply sensible than I am of the high honour done to me by the opinions and labours of that Committee—no time will efface the recollection of it from my mind. It would be most gratifying to my feelings that the money raised by the munificent liberality of the subscribers to this unlooked-for testimonial should not be expended in any memorial of myself, or be applied to any purposes merely personal in character. Permit me to suggest to the Committee, for their consideration, whether the amount subscribed might not be laid out in some manner that would permanently benefit the Queen's College, and furnish instructive recreation for the inhabitants of this my native town. It has occurred to me that those objects might be concurrently promoted by devoting part of the fund to the foundation of Medical Scholarships, and the remainder towards the completion of the College

Museums, under the stipulation that the Council of the College do undertake to grant free admission to the industrious classes once a week, under such regulations as may be deemed necessary and proper. I remain, my dear Sir, yours faithfully,
"The Mayor of Birmingham. WILLIAM SANDS COX."

APPOINTMENT AND TESTIMONIAL.—Benjamin Barrow, Esq., Surgeon to the Isle of Wight Royal Infirmary, has been appointed Chairman of the Board of Commissioners for improving the town of Ryde, etc. A considerable sum has been raised by private subscription to present this gentleman with a Testimonial for his unwearied exertions in the cause of Sanitary Reform; this sum he has appropriated to the erection of a Public Museum of Natural History, which will, it is expected, be opened in a few months. The inhabitants and visitors are mainly indebted to Mr. Barrow for a constant supply at high pressure of pure water procured from springs at the foot of Ashe Down, four miles from the town; and also for great improvements in the drainage, which is now carried, by means of two main trunks, to low-water mark. The effect upon the public health, since the introduction of the water and the clearing away of cesspits and privies, has been most striking in the dwellings of the poor.

ST. MARY'S HOSPITAL.—Mr. Toynbee will commence his Course of Lectures on the Nature and Treatment of the Diseases of the Ear, on Thursday, May 7, at half-past 2 o'clock.

MUNIFICENT BEQUEST.—George Jones, Esq., of Shackerley, has bequeathed £1000 to the South Staffordshire Hospital.

INCREASED CONSUMPTION OF OPIUM IN ENGLAND.—In 1830, there were 103,711lbs. of opium received in London; and in 1852, 250,790lbs. This increase has been going on for years, and the fact has been urged against the tea-totallers; but it is singular that Wisbeach, the town which consumes the largest quantity of spirits in proportion to population, also consumes the largest quantity of opium. Some have supposed that the practice of opium-eating is increasing; the true explanation may perhaps be found in the very great use made of opium in cattle medicines of late years. It is not unusual to give six drachms of laudanum to a sheep, and two or three ounces to a horse.

THE WASHINGTON EPIDEMIC.—An epidemic of diarrhoea and low fever at Washington, especially in one of the hotels, has led to a number of absurd stories. It is, however, satisfactorily accounted for by a writer in the *New York Times*, as follows:—"Every stranger who goes to Washington is at first subject to relaxation of the bowels, and sometimes to serious irritation. This is clearly traceable to the quality of the water, which is chiefly supplied by surface springs, and is highly charged with earthy salts, which make it, in fact, a modified mineral water. On the occasion of heavy rains, or thaws, this peculiarity is aggravated by the surface water flowing into the springs. Dr. Antisell, the chemist of the Smithsonian Institution, after analyzing the water, gave his written opinion that the medicinal quality of the spring water was quite sufficient of itself to produce serious irritation and disease of the digestive organs. Here, then, we have an ascertained cause for the general malady. But we must yet account for its special malignity at the National Hotel. The sewerage of Washington is generally very good. The main sewer, however, running by the National, has very little fall to the canal, distant about two squares, which is the common receptacle of the sewer's contents. Of course much of the solid deposit entering into the sewer is apt to remain there until a flooding rain (such as we do not get in winter) furnishes a stream to wash it out. These deposits evolve large quantities of mephitic vapour, which, of necessity, must escape somewhere. In former years it escaped by the gutter openings into the sewer, placed at the street corners. Last autumn, these were modified by the insertion of stench-traps, which prevent the escape of the noxious vapour into the street, and compel it to seek other outlet. This it finds ordinarily, although with difficulty, at the point where the sewer debouches into the canal; but when the outlet there is closed there is but one other direction in which it can find outlet, and that is by the house connexions with the sewer into the hotel itself, where it poisons the air, and sows the seeds of disease among all who are subject thereto."

THE LEGION OF HONOUR AND THE ENGLISH ARMY.—The Emperor, by a decree of the 3d of April, 1857, on the proposal of the Minister of Foreign Affairs, has promoted the following English Medical officers in the Imperial Order of

the Legion of Honour:—*Knights*, Surgeon-Major Dr. Arthur Anderson, M.D.; Surgeon-Major Dr. John Ramsay Brush, M.D.; Assistant-Major John Wyatt, Coldstream; Surgeon-Major John Ashton Bostock, M.D., Scots Fusileer Guards; Surgeon-Major R. F. Valpy de Lisle, 4th Regiment; Surgeon-Major A. P. Lockwood, late 7th Regiment; Surgeon-Major Thomas Longmore, 19th Regiment; Surgeon-Major D. R. Mackinnon, 21st Regiment; Surgeon-Major B. G. Barlow, M.D., 28th Regiment; Surgeon-Major G. M. Muir, M.D., 33d Regiment; Surgeon-Major John Fraser, M.D.; Surgeon-Major J. B. St. Croix Crosse, 11th Hussars; Veterinary Surgeon J. G. Gloag, late 11th Hussars; James Carmichael, M.D.; Richard Denton Mason, M.D.; William Vernon Eliakim Reynolds.—*Officer*, David Deas, Chief Surgeon of the Fleet.

NEW LUNATIC ASYLUM FOR THE COUNTIES OF BEDFORD, HERTFORD, and HUNTINGDON.—About 260 acres of land, situate at Stotfold, Bedfordshire, have been purchased by the Visiting Committee, under the Act of 1853, for the site and appurtenances. Plans and estimates have been accepted for a building capable of containing 500 patients. The work is to commence immediately, and the total cost will amount to £95,000 (say £100,000), which will give, at 5 per cent., for the house-accommodation of each patient, just £10 per annum, exclusive of the value of the produce of the land.

EASY CHAIRS TO REGIMENTAL HOSPITALS.—We learn with pleasure that the War Office authorities have sanctioned the issue of two easy chairs to each regimental hospital in the service.

POISONING BY ACONITE.—The following paragraph has appeared in several Irish papers:—A farmer called James M'Creary, belonging to Aghnamoyle, near Omagh, on Saturday night last, took as a draught a spoonful of liniment containing, aconite which had been prescribed for a pain in the leg by Dr. Maxwell, and did not survive more than an hour. It appeared the bottle had been labelled, "To be applied externally," so that no blame rests on the doctor. Mr. Orr held an inquest on the body—verdict, "Death from taking an outward application in mistake."

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 18, 1857.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	573	511	1084
Average of the ten years 1847-56 ... ..	...	...	1058
Average corrected to increased population	...	...	1164
Corrected average for corresponding week in ten years 1847-56	549.9	508.4	1058.3
Deaths of people above 90	2	2	4
Deaths in 13 General Hospitals	43	21	64

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population. 1851.	Small-pox.	Measles.	Scarlatina.	Hoop-ing-Cough.	Diarrhoea.	Typhus
West	376,427	..	2	3	10	1	4
North	490,396	..	7	3	10	2	10
Central ..	393,256	..	9	2	16	3	4
East	485,522	..	3	10	18	9	13
South	616,635	1	3	8	17	2	7
Total..	2,362,236	1	24	26	71	17	38

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer ... ..	...	...	...	...	...	29.453
Mean temperature ... ..	...	...	...	...	...	43.4
Highest point of thermometer ... ..	...	...	...	...	...	68.5
Lowest point of thermometer ... ..	...	...	...	...	...	31.4
Mean dew-point temperature ... ..	...	...	...	...	...	38.1
General direction of wind ... ..	...	...	...	...	...	Variable.
Whole amount of rain in the week ... ..	...	...	...	...	...	0.38
Amount of horizontal movement of air in the week ... ..	...	...	...	...	...	875 miles

ORIGINAL LECTURES.

LECTURE

ON

THE PATHOLOGY AND MORBID ANATOMY
OF CATARACT,INCLUDING A CONSIDERATION OF THE
ANATOMY AND PHYSIOLOGY OF THE HEALTHY LENS.

By R. TAYLOR, Esq.

Surgeon to the Central London Ophthalmic Hospital.

Question of the removal of lenticular cataract by therapeutic measures.—Minute anatomy of the lens.—The lenticular fibres are tubular; reasons for this opinion.—Chemical composition.—Changes in the lens produced by age of the individual.—Natural colouration of the lens a frequent source of error in diagnosis.—Importance of understanding this.—The subject but little known.—Morbid changes wrought in the lenticular structures by hard cataract.—Absence of any proof of fatty degeneration, as commonly supposed.—Presence of Cholesterine otherwise accounted for.—Impossibility of restoring transparency to a lens thus altered.

GENTLEMEN, I wish to draw your attention in to-day's lecture to the changes which take place in the crystalline lens in cases of cataract. You will often be asked by your patients whether it is not possible to cure this disease by other than surgical means; and you will find that there are many who profess to do so. It is true that by far the greater number of those who make such a profession are mere charlatans, whose sole object is to transfer the money of their dupes to their own pockets; but such is not invariably the case; even regularly educated Surgeons are occasionally impressed with the idea that transparency may be restored to the opaque lens, and can quote cases in which they conceive that they have succeeded in doing so. After you have heard what I have to say on the subject, you may judge for yourselves as to the feasibility of such a cure, and will be on your guard against a very common source of error in diagnosis, by which many are misled into the belief that cataract is present, while the lens is in a perfectly normal condition, and the cause of the defective vision is to be sought elsewhere.

I shall first advert to a few points in the anatomy of the healthy lens, some of which are not mentioned in books; for it is impossible to appreciate the changes wrought by disease in any organ, without thoroughly understanding its normal structures.

With regard to the capsule, I shall merely remind you that it is a perfectly homogeneous membrane, brittle and elastic, somewhat resembling the cartilage of joints in consistence, and, as pointed out by Mr. Bowman, curling up, when lacerated, in the direction opposite to that of its natural curvature. Externally it is bathed in the aqueous humour without any intervening epithelium; internally it is lined with a layer of delicate, somewhat hexagonal nucleated cells.

The structure of the lens is much more complicated. In immediate relation with the epithelial lining of the capsule, it consists chiefly of cells and elementary fibres. The cells vary much in size. In rough terms, I may say that they vary from one-sixth the diameter of the ordinary blood-cell, to four times that of the largest white blood-cell. The walls of the small cells are generally thick, dense, and highly refractive; those of the large ones (sometimes termed "globuli lentis,") are exceedingly thin and delicate, so as to require much care before they can be observed. When tinged of a yellow colour, as these large cells frequently are in old people, they very much resemble drops of oil, for which I have reason to believe they are often mistaken. These cells are found in greatest abundance on the superficies of the lens, penetrating, in rapidly diminishing proportion, to about one-sixth of the thickness between the surface and the centre. The great bulk of the lens consists of what are by some anatomists considered as solid, by others as tubular fibres, arranged in innumerable layers, and following a very complicated and somewhat spiral course, elaborately described by Mr. Bowman. With regard to the question as to whether they are solid or tubular, I incline to the opinion of those who advocate the latter view, and for the following reasons:—

1. On examining a thin plane of fibres under the microscope, I have often observed that when they have lain for a short time under the gentle pressure of the covering glass, a bead-like row of globules, of perfect transparency, collects at their torn extremities, and these gradually increase in size until they have attained a considerable magnitude. If, by manipulation of the covering glass, a current of water be now directed so as to sweep past them, you will observe them gradually yielding to its force, elongating into a pyriform shape, the narrow stalk becoming gradually more and more attenuated until it finally breaks, when, immediately resuming its globular form, the portion in question is swept off by the current. At other times, we may observe two of these globules, when they have attained a certain size, and have come into close contact, suddenly to coalesce, so as to form one large drop. It is therefore not unreasonable to conclude that this is a viscid fluid, contained in the interior of the tubular fibres, and pressed out by the superincumbent weight, aided in part, perhaps, by the elasticity of their walls.

2. The nuclear fibres of hard cataracts, as will be fully described presently, are exceedingly dry and brittle, and break up readily under the dissecting needle into very short fragments. When these little fragments are made to roll across the field of the microscope, they have appeared to me as distinctly hollow as the most perfectly developed cell from any tissue or deposit.

With regard to its chemical constitution, the lens consists chiefly of albumen, with a certain proportion of a peculiar substance termed *crystallin* by Simon, its discoverer, and a small quantity of fatty matter, which may be readily separated by the action of boiling ether. A large quantity, probably the greater proportion of the albumen, is in a fluid state, partly contained within the cells and tubes, and partly, in particular towards the surface of the lens, bathing their exterior. It is extremely susceptible of coagulation; a faint, bluish opacity is at once perceived when a small fragment of the lens is placed in a drop of water for microscopical examination, and, if acetic acid be added, its structure is immediately obscured by the dense layer of minute granules into which the albuminous blastema is converted. The appearance exactly resembles that produced by coagulating the white of egg in a similar way. The albuminous nature of the contents of the cells is best shown by the action of muriatic acid. For a short time, proportional to the thickness of their walls, they remain unchanged, but at last the acid penetrates to their interior, when they are instantly converted into a solid, granular mass. This change is best seen in the large cells; some of the smaller ones have such dense, horny walls, that they resist the action of the acid for a long time.

Ether produces such a dense and firm coagulum, as completely to obscure the lenticular structures; hence its inapplicability as a microscopical test for the presence of fatty matter.

The consistence of the healthy lens varies with the age. In young persons, in its densest part, the nucleus, it is not firmer than soft jelly, and at the surface the lens is almost fluid. With advancing years the nucleus becomes gradually firmer; but I think this increase of density has been rather exaggerated. Of very many healthy lenses, from subjects varying from 60 to 93 years of age, I have never found one in which the consistence of the nucleus exceeded that of tolerably firm calf's-foot jelly—a familiar comparison, but one which may convey a more accurate idea than a more elaborate attempt at description.

In early life the lens is perfectly colourless, and the pupil appears perfectly black; but with advancing years it (the lens) gradually assumes an amber colour, more or less deep. The age at which this change commences varies exceedingly: I have seen it distinctly present at 15, and very strongly marked at 35, while again, it has been but slight in a person of 60; but I believe you will rarely fail to find it at 45. In the coloured races, and in those who have any admixture of black blood, it appears to be more readily developed, and at an earlier period of life. I have never yet seen a person beyond the age of 50 in which it was absent, and I believe that it may be looked for with as much certainty as the blanching of the hair, or the wrinkling of the skin. The colour pervades the whole of the lens, but is much more intense in the nucleus, fading off towards the cortical layers, where it appears to be confined to a few of the large cells. The colouring matter, whatever may be its nature, is in solution; there are not any

pigment cells or granules, which last, it is said, are found in black cataracts. Unless it is very intense, the colouration does not interfere with vision; nor, however deep may be the colour, have I ever heard any complaint of a yellow hue being thrown over objects, as in looking through a piece of yellow glass; nor is there any difficulty in distinguishing different shades of colour, even of blue and green.

Now, it is exceedingly important that you should be thoroughly familiar with this change, for, from the grey appearance which it gives to the pupil, it is one of the most fertile sources of error in the diagnosis of cataract. Of this I have seen many instances, and I believe that it is the error committed most commonly by those who fancy that they have cured cataracts by local applications or internal medicines: they have erred in their diagnosis; the impairment of sight has been due to some remediable defect in one of the other tissues, and they have been deceived by the perfectly normal colouration of the lens. My time will not permit me to dwell upon the best mode of avoiding such mistakes; upon this point I must refer you to a paper by my colleague Mr. Haynes Walton, in the *Medical Times and Gazette* for June 28th, 1856, where you will find it fully treated; but I cannot too strongly recommend you to lose no opportunity of studying it in the healthy eyes of old persons, availing yourselves of the assistance afforded by condensing the light upon the pupil by means of a lens of one or two inches focus, which will bring out the peculiar appearance much more distinctly.

The lens derives its nutrition from the aqueous humour, modified in its qualities during its passage through the capsule. That such modification is necessary is evident from the opacity and subsequent absorption which result from its being admitted into direct contact with the lens, by laceration of the capsule, whether designedly or by accident.

There are several other points of great interest connected with the anatomy and physiology of the healthy lens, upon which time will not permit me to enter. You may think that I have already dwelt too long on such topics, but familiarity with the healthy structures will alone enable you to avoid the error so frequently committed of describing as morbid, structures that are perfectly normal.

I shall now go on to consider the changes wrought in the lenticular structures by cataract. My observations will refer exclusively to what is termed "hard cataract," that, namely, which occurs most commonly in persons from 40 years of age and upwards, and which is usually removed by the operation of extraction. Of this there are two varieties; one commencing at the surface, thence called cortical, the other, much less common, commencing in the nucleus, thence called nuclear cataract.

In cortical cataract, the superficial layers are converted into a soft, grey, semifluid pulp, which mixes readily with water, so as to render it turbid. The tubes readily break into short fragments under the dissecting needle, whereas those of the healthy lens are tough and elastic, and cohere firmly, requiring some dissection to separate them. In nuclear cataracts, the same changes will be found more or less developed, according to the duration of the disease, which in such cases proceeds from the centre to the surface; I believe that time alone is required to render the change complete in every instance.

But the most remarkable change which occurs both in cortical and nuclear cataracts, is in the nucleus; and it is of such a striking character that it is surprising that it has not attracted more attention. I have already told you that the healthy nucleus, even in very old persons, does not acquire a greater consistence than that of strong jelly; but in cataract, when fully developed, the contrast is very striking. Here we find it hard and dry, as if it had been deprived of the greater part of its moisture by heat. If you attempt to divide it by means of the needle, however fine, you will find that instead of yielding to little more than the weight of the instrument, as is the case with the healthy lens, considerable force is necessary; in one instance, in a cataract from a man aged 77, the needle which I used actually broke. Farther, the division is effected rather by a fracture than by a cut, and the surfaces are rough, dry, and covered as with a fine white dust. The degree of hardness does not appear to depend upon the age of the patient, but rather upon the duration of the disease. It was well marked in two cataracts which I extracted from the eyes of a gentleman aged 41. It is certainly one of the most curious phenomena of the disease, that there

can be such an amount of dryness in a structure which is constantly immersed in a nearly fluid medium.

When the soft grey pulp from the cortex is examined with the microscope, we find a quantity of fine molecular matter, partly floating free, partly aggregated in masses, and partly studding the exterior of the tubes. Whether any is contained within the tubes, I have not been able to determine. This appearance can be exactly imitated in the healthy lens by the addition of a weak acid, and is caused by the coagulation of the albuminous blastema in which the lens-tissues are immersed.

The large cells from the surface will also be found to have undergone more or less change. Many of them are rendered opaque by the coagulation of their contents into a granular mass, as we have already seen occurs in the cells of the healthy lens on the addition of acid. Others are altered in shape; bent and twisted in various directions. They are generally yellow in colour, and the tinge is deepest in those which are most altered from the normal forms.

Floating in the lenticular *débris*, or imbedded among the fibres, are occasionally seen a few crystals of cholesterine. If I were to judge from my own experience, I should say that such an occurrence was exceptional.

The tubes generally retain the regularity of their outline, but I have occasionally found a few of them bulging and irregular. I have also observed some which appeared to be split up into a number of fibrils, but not sufficiently often to speak positively as to this. The evidence of their softening is chiefly derived from the complete loss of their cohesion one to another, and from the facility with which they fall into fragments at the touch of the needle.

The tubes of the nucleus are hard, dry, and horny, and crumble before the slightest touch of the needle. They are in general, but not universally, loaded with a fine granular deposit, similar to that which occurs in the cortex. Their outline is extremely irregular, being disfigured in some places by little tubercles and nodules, in others by clefts and fissures. In many there are little transverse markings, and I have occasionally observed longitudinal markings, as if there was a tendency to fibrillation; a tendency more distinctly evidenced by the irregular and jagged condition of their broken extremities. Some preserve their natural size, but many appear withered and atrophied.

Such are the principal changes which occur in the species of cataract to which these observations are limited. They have been ascribed to fatty degeneration, but I have never seen any evidence of the existence of this form of decay, the few crystals of cholesterine which are occasionally found not being more than can be accounted for by the fatty matter, which forms one of the normal constituents of the lens. Coagulation of the albumen, and softening, with more or less disintegration of the tubes, are the causes of the opacity, so far as the cortex is concerned; and these may be ascribed either to loss of vitality in the capsule, whereby it loses its power of modifying the aqueous humour in its transit, or to death commencing in the lens itself. The latter supposition appears the more probable, from the partial extent and slow progress of the disease when it begins at the surface, which would not be the case were it all equally exposed to the unaltered aqueous humour; and, also, from the fact that the very curious and inexplicable form which the disease assumes in the nucleus, may commence and long continue, while the superficies is still clear and transparent.

You are now in a condition to form an opinion as to the possibility of restoring transparency to a lens thus altered; and I think you will agree with me that the attempt to restore vitality to a necrosed bone or a mortified limb would be equally hopeful. The cataractous lens is dead and disorganized, and nothing short of creative power can restore it to life, and to the performance of its functions; and this appears to be such a self-evident proposition that I shall not spend more time in enforcing it.

But it has been said, that though the transparency of the cataractous lens cannot be restored, still its absorption may be procured by means of suitable medicines. In the present imperfect state of our knowledge with respect to the powers of drugs, it would be rash to assert that such is an impossibility, though assuredly no such medicine has hitherto been discovered. At the same time, probability is strongly against it, inasmuch as what I may be allowed to term *healthy* cataracts, are never removed by the efforts of nature, in this

respect differing from those opacities of the lens which are the result of inflammation, whether traumatic or of a slow, disorganizing character. But even were such a remedy discovered, I do not see that much would be gained. Under no circumstances is the capsule absorbed, and even though the lens were gone it would still hang in a dense, impervious curtain before the pupil, and would still require an operation for its removal. I think, therefore, that your time may be more profitably occupied than in pursuing what nature herself declares to be a phantom of the imagination.

ORIGINAL COMMUNICATIONS.

ARMY MEDICAL REPORTS.

(SELECTED, BY AUTHORITY OF THE DIRECTOR-GENERAL, FROM DOCUMENTS IN THE OFFICE OF THE ARMY MEDICAL DEPARTMENT.)

No. XXIX.

ON THE USE OF THE KAMEELA OR REROO AS AN ANTHELMINTIC,

AND ON THE DEPENDENCE OF TAPEWORM ON UNWHOLESOME ANIMAL FOOD.

By CHARLES ALEX. GORDON, M.D.

Surgeon 10th Regiment of Foot.

[In a Report on the Statistics of Diseases of the Stomach and Bowels, as they affect Soldiers, etc., in India, Dr. Gordon gives some account of the efficacy of a native plant, as an anthelmintic, stating that it is more efficacious and much cheaper than Koussou. This report will be found in our last volume, page 538. The following interesting paper contains a fuller account of this drug. The plant is the *Rottlera tinctoria*, Section *Crotonæ*, of the N. O. *Euphorbiaceæ* (London). Dr. Gordon informs us that Sir William Hooker showed him a beautiful and correct representation of this plant in Roxburgh's *Plants of Coromandel*, Plate 168, vol. ii.]

The success and rapidity of effect of the kameela in removing tapeworm in the cases of soldiers of the 10th Regiment, to whom I administered it, were such that I did not consider it worth my while to keep notes of them after the first two or three; nor, indeed, were the men to whom it was administered latterly taken into Hospital, for they soon became aware of the wonderful efficacy of the remedy, asking of their own accord for a dose of it, after which they invariably parted with the worm in the course of a few hours, and then went on with their military duty as if nothing had happened; while, as I afterwards ascertained, considerable numbers did not think of "troubling the doctor at all," but, on suffering from the characteristic symptoms of the worm, applied for the kameela to the apothecary, and always with the same effect.

Tænia appears to be of very frequent occurrence among the white troops in India. I have not observed it to be unusually common in the Lower provinces, but in Upper India, and especially the Punjab, cases of it are of remarkable frequency; and I have been told by some Medical officers who have been stationed at Peshawur, our nearest cantonment to Affghanistan, that they firmly believe every third soldier has had tape-worm during the two years regiments usually remain there.

From what I have been able to ascertain on the subject, natives are not particularly liable to tape-worm, and certainly not more so in the north-western parts of India than in lower Bengal. This is generally attributed to their almost total abstinence from animal food; and when we consider that both Hindoos and Mussulmans—all except the very lowest classes—abhor pig's flesh, while our own countrymen are rather partial to it, and the common soldier, probably, not very particular regarding the early history of the animal that is converted into pork for his use, an additional circumstance in favour of the transformation of the *cysticercus* constituting the "measles" of pork into *Tænia*, is thus disclosed to us.

Those who have escaped the misfortune of having had to pass some years in India, can form no idea of the vast herds of lean, half-starved pigs that roam over the fields and waste

grounds in the vicinity of villages, neither can they have any conception of the nature of the food on which these pigs subsist.

The natives of India perform their ordinary natural functions in the open air, on a piece of waste ground left for the purpose on the outskirts of every village, and where, morning and evening, men, women, children and pigs dot the ground at short intervals from each other. In an incredibly short space of time after the villagers have left the field, it is as clean as if they had never been there, while the herd by which the clearance has been effected may be found in some shady place near or close to a tank, with the exception of a few of the more insatiable that have gone to hunt for dead dogs, cats, cattle, and Hindoos that have paid the debt of nature since the previous meeting, and have been thrown or left on the plain to be devoured by domestic animals or vultures.

These circumstances hold good more as regards the south-western provinces, where there are comparatively few rivers, than in lower Bengal, where rivers are numerous, and into which the dead of all descriptions are thrown; some clue may therefore be obtained to the cause of the greater frequency of diseased pigs' flesh in the one portion of the country than in the other; and as a consequence, the greater prevalence of tape-worm in the one part than the other.

Pigs, however, are not the only animals that live in this filthy manner in India; cattle and sheep, that are so particular in their food in Britain, acquire degenerate tastes in India; and it is needless to enter into similar particulars regarding ducks, fowls, turkeys, and pigeons, all of which are more or less used as food by our countrymen there.

I have thus alluded to these matters with a view to indicate some circumstances that most unquestionably tend to vitiate the quality of the animal food upon which our troops in India must subsist, and I think I have at least shown a sufficient cause for almost any amount of disease in the bodies of these animals; as also why their flesh should be more liable to become diseased in upper India than in lower Bengal.

I may observe, that the remedy most generally used in India for tape-worm, next to kameela, is the root of the bitter pomegranate; as, however, severe abdominal pain, nausea, and severe convulsions not unfrequently follow its use, it is by no means a general favourite.

The more common vermifuges employed in this country are well known to the natives of India, such as *Dolichos pruriens*, and turpentine. They also employ the infusion of gentian and chyretta, as well as several other powerful bitters; all, however, are comparatively uncertain in their effect; and many, especially the turpentine, are so disagreeable to take, that many persons would rather submit to the torment of an intestinal worm than take so disagreeable a remedy.

With kameela there is no unpleasant effect. It is not even necessary to take a dose of purging medicine as a preparative; and beyond a trifling amount of nausea and griping in some instances, no unpleasant effects are experienced; while by far the greater number of persons to whom it is administered suffer no inconvenience whatever beyond what they would from a dose of ordinary purging medicine.

The following are abstracts of the first three cases that came under my observation in which the kameela was administered, the notes having been taken on the spot and at the time, namely:—

1.—T. S., aged 32, 10th Foot; admitted January 25, 1854, complaining of general debility, from which he had fallen down while on parade. He had suspicions of being affected with intestinal worms; tongue was coated with a white fur. Common quinine mixture was given three times a-day until the case was more fully watched. On the 29th 3j. of kameela (*rottlera tinctoria*) was administered, mixed up with water, at 9 a.m., and a similar dose at noon. At 1 p.m. he felt a little sick, had no griping, was not violently purged, but passed about twenty feet of *tænia lata*, the head apparently coming away as well. He immediately felt well, had no more medicine, and on the 31st was discharged cured.

2.—Private C. D., 10th Foot; admitted 22nd January, 1854, with syphilis primitiva. While being treated for that disease became affected with *tænia*. Kameela was accordingly given in 3j. doses, but five doses had to be given at intervals of three hours before any effect took place. A large quantity of tapeworm was then evacuated, and he immediately felt himself quite well. He was discharged, cured of both diseases, on 6th February, 1854.

3.—Private S., 10th Foot; admitted into the Dispensary May 25, 1854, stating that he was voiding pieces of tapeworm, to which he had been subject for a period of two months; and, having in the early part of the attack been treated with kameela, he voided eighteen feet of worm. He now looked healthy. A dose, consisting of 5 grains of calomel, and ʒj. of compound powder of jalap, was immediately given, about six o'clock, a.m., ʒj. of kameela about nine, and another about noon. At two p.m. he voided one piece of tapeworm upwards of twenty feet long, including the filamentous portion near the head. On the 26th he felt well, and was discharged.

In the absence of a magnifying glass, it is difficult to say with precision whether the head is discharged along with the rest of the animal; but, so far as the eye can judge, I am almost positively certain that it is. The worm has, in every case observed by me, been discharged in a dead state; but whether the tendency to the generation of other tæniæ is removed by the medicine is more than doubtful. In fact, from the nature of the food of animals that themselves furnish the food of Europeans in India, the wonder probably is, not that tapeworm is of frequent occurrence among them in certain districts, but that any person is free from it; while it must be equally clear, that the tendency to its development in the intestinal canal can only be removed by a removal of the causes upon which it, in all probability, depends, namely, by the selection of a superior description of food for our troops than what they now obtain, and by the establishment of rigid sanitary regulations among the native community. The latter involves the destruction of the prejudices of a religion and of a race that have undergone no improvement for thousands of years.

There is an article on the Kameela, written by Dr. Thomas Anderson, of the East India Company's service, in the *Indian Annals of Medicine* for October, 1855. Many of his experiments were performed in the hospital of the 10th regiment, with which for a time he did duty. In this paper there is a very excellent description of the substance, as well as of the various modes in which it was administered. Suffice it to say that we prepared a spirituous tincture by adding Oj. of alcohol to ʒiv. of the powder, and then filtering. We never succeeded in obtaining more than ʒvj. in this way, and of this ʒj. in a little mint-water was generally found to be a sufficient dose, ʒij. being in some cases required, and perhaps in one or two, ʒijj., but I have never seen the remedy fail in removing the worm in a case where there were unequivocal symptoms of its presence, for, as you are well aware, many persons insist upon it that they are suffering from intestinal worms, and yet have no absolute proof of being thus affected. Such persons are frequently met with in India; these symptoms being in reality due to liver, dyspepsia, brandy, or tobacco, and it must be obvious that no amount of kameela or anything else could remove a tapeworm that had no existence.(a)

JERSEY HOSPITAL REPORTS.

By G. M. JONES, Esq.

Surgeon to the Jersey Hospital.

SUCCESSFUL CASE OF TRACHEOTOMY IN CROUP.

LAST autumn I published a case of croup in which tracheotomy had been successfully performed, and shortly afterwards remarks, strongly advocating an earlier recourse to this operation than is recommended or followed by the generality of British practitioners. Further, though certainly still limited, experience has tended greatly to confirm the views I then entertained, and I am now more than ever impressed with the conviction, that if resorted to at a proper period of the attack, statistics will show a gratifying result, and not as heretofore one which, by throwing discredit on the operation, has been the means of preventing many from attempting it.

I have performed tracheotomy four times in cynanche trachealis. In the first instance the patient was placed under my care shortly after the disease manifested itself; the ordinary remedies employed in this affection were sedulously carried out, notwithstanding which the disease gained ground, and about twenty hours after my being first called in I pro-

posed the operation; it was at once rejected by the little sufferer's friends. Some ten or twelve hours after, that which for some time had been evident to me became so to the parents, and I was then entreated to do that which I had before vainly solicited to be allowed to resort to. I performed tracheotomy, and a short time after the child expired.

My second case is the one already reported as published.

It was at the request of a medical friend that I operated in the third case; he had been unwearied in his exertions, and, according to my views, had trusted to medicine too long. When I saw the child the last stage of croup was far advanced, and three hours after she expired.

The fourth case is the subject of this "Hospital Report."

Henry Kilvington, aged 2 years and 9 months, a remarkably healthy-looking and very stout child, seemed unusually dull, and coughed a little on Saturday, the 28th of March. The night was a restless one, but he appeared tolerably well the following day; again, towards evening, the same dullness, with increased cough, came on, and morning found the latter considerably increased. I was now called in, and found him labouring under well-marked croup. I watched the case most attentively, and saw both external and internal remedies properly and regularly attended to. At 5 p.m. the child was evidently worse, and by 7 it was very apparent that, although symptoms characteristic of approaching dissolution did not yet exist, still, as medicine had proved altogether inefficacious in arresting the progress of the disease, it did not require much foresight to pronounce the case incurable by the means ordinarily employed. The child was at once conveyed to the hospital, and tracheotomy performed. I shall merely state, that 25 hours after the tube had to be withdrawn, in consequence of a large portion of false membrane having completely stopped it, and again, 7 hours later, for the same cause. Immediately after the operation a large blister was applied to the sternum, and small doses of calomel given every four hours, and continued for two days. On the 5th day the tube was removed, and on the 14th after the operation the child was discharged from the hospital cured.

These cases, although few in number, appear to me to establish an important fact—they go far to prove that the odium tracheotomy has obtained in croup arises much more from the fault of the practitioner than from the operation itself, and that, if performed in time, it is calculated to attain that which medicine and other means have failed to achieve. In two, death followed the operation, in the remaining two perfect recovery was the result. In the latter the operation was performed after medicine had had a fair trial; in the former after it had been trusted in too long. It strikes me that one great point ought never to be lost sight of in this truly formidable disease, I mean the careful watching of symptoms, and the attentively comparing those which show themselves at one hour, with those which existed an hour or more before. That hope is, indeed, fallacious, which leads us to suppose that, because we have kept symptoms in abeyance, we are, therefore, mastering the malady. Possibly this may occasionally occur, but in croup stationary symptoms must not be too much trusted to, they are often the

"Deceptive lull, forerunner of the storm."

By all means let medicine and other remedies take precedence of operative measures, but let not actual symptoms of approaching death arise before having recourse to an operation, which, I feel fully persuaded, may, if performed in time, save the lives of many.

CASE OF ACUTE TRAUMATIC TETANUS TREATED WITH OPIUM—RECOVERY.

By W. BATEMAN, Esq., M.R.C.S.

Henry Amos, a small delicate-looking boy, 12 years old, was brought to me on Monday, January the 5th, having had two fingers of the left hand injured by a thrashing machine. The upper part of the forefinger was torn at its extremity, the nail hanging by the skin on one side; the upper surface of the last phalanx bare, but the bone not injured; the integument of the other finger was split, but there was no loss of substance. I removed the nail, and dressed the finger with wet lint. The boy, who was a manly little fellow, made very light of the injury. There was a little sloughing from the fore-

(a) Dr. Gordon has favoured us with a supply of kameela, which Dr. Jenner proposes to give to some of his hospital cases, and we will make known the result.—Ed.

finger, but healthy granulations had formed, and the wound was fast healing. On Saturday, 17th, when he walked down with his mother, a distance of about four miles, to see me, and while I was dressing his finger, he told me that for a day or two he had had some difficulty in eating, although he was very hungry; that eating had given him a pain in the face, and his jaws felt stiff. He assured me it had all disappeared now; he had at this time no difficulty in opening his mouth, but his pulse was quick, and he had an uneasy irritable expression. His mother told me that he was nervous, and much annoyed if any of his brothers and sisters made any noise or came near him. He was feverish, and the bowels were confined. I gave him six grains of calomel and half a grain of tartar emetic in four powders, to take one every four hours. As he was going home that day he was much startled by a gun being fired near him; he fell down, and thought he was shot in the leg.

On the 19th he had occasional slight spasms of the jaws, in one of which he bit his tongue; and the jaws were now getting fixed, so that the teeth could not be separated more than one-eighth of an inch. Pulse 120, small and irritable, countenance pale, haggard and anxious, the corners of the mouth drawn towards the ears. This becomes more apparent when he speaks. Tinct. opii m viii . quartis horis.

20th. The teeth closely clenched, short spasms of the abdominal muscles occur at intervals; the abdomen hard. Has a great dislike to any thin liquid, such as water or tea, but takes thick gruel with wine. Fortunately there is a tooth wanting in the upper jaw, and he takes his food with ease through a long narrow necked Eau de Cologne bottle, the use of which he was the first to suggest. Sometimes, however, the act of deglutition brings on a spasm of the throat. A dose of castor oil has produced healthy and copious evacuations. I increased the dose of tinct. opii to m x ., and added m x . of chloroform to each dose.

21st. Spasms of jaws and abdominal muscles have been more frequent and severe. In the night, while getting out of bed, he was seized with a violent attack of opisthotonos, which threw him backwards on the floor. Pulse 118, fuller. Face swollen over the temporal and masseter muscles. He is cheerful and hopeful, and says he has no pain except when the spasms come on. Pupils dilated. No sleep.

22nd. Spasms of the back frequent and violent, and the muscles remain rigid during the intervals, so that the body is arched, and he rests only on the buttocks and back of the head; the legs and thighs are stretched out to their full length, with the feet extended and the toes pointed painfully. When the spasms occur, he complains of pain chiefly in the region of the tendo-Achillis. The wound gives no pain or annoyance, and the arms are less affected than any other part. Has not the same dislike to liquids, but drinks wine and water, beef-tea and porter. Face flushed, and the whole body perspiring from continual effort. Pulse 100, fuller and softer.

I now increased the dose of the opium to m xv . giving him a dose of castor oil every other day. The tetanic spasms continue to occur every few minutes with great violence in all the muscles of the trunk and the lower extremities. During the intervals the muscles are hard and rigid as boards, the legs painfully extended and drawn outwards. Finding that the large doses of opium produced no apparent influence on the system, I began, on the 24th, to give him the same dose every two hours. He now took less food, and the pulse was fluttering. I ordered him eggs beat up in wine, and, what he himself fancied, gruel made with beer.

25th.—Spasms, less violent, and chiefly confined to the left side of the body. The quadratus lumborum and abdominal muscles particularly affected.

26th.—Spasms less frequent and less severe, and he is inclined to sleep between the paroxysms. The wound is nearly cicatrized.

28th.—Paroxysms in the left side, from the shoulder to the foot, occur at intervals of about half an hour, but anything happening suddenly, such as a gate of the farm-yard banging, or any one coming into the room unexpectedly, brings them on at any time. He sleeps a little in the intervals, but never heavily. Takes nourishment freely, particularly the eggs in wine. He continued in about the same state, the spasms gradually becoming less frequent, but occasionally very severe. During the intervals every muscle that has at any time been affected by them remains rigid, and he has not the slightest

power of voluntary motion except in the arms, which have scarcely been affected. The muscles of the abdomen and back are as hard as boards; he sometimes loses the power over the bladder. Once he was 36 hours without making any water, as I was not able to employ the catheter, being fearful of the irritation the use of it might bring on. Pulse 98, fuller and firmer. Takes plenty of nourishment, and has a short sleep occasionally.

Up to the 5th there has been a gradual improvement. The paroxysms occur less frequently, and less violently; sometimes there is a cessation for two hours. They are confined to the left side, and he complains more of the heels than any other part. During all this time he has continued to take the opium m xv . every two hours. When free from pain he feels inclined to sleep, but awakes very easily, and then his eyes are as bright as ever, and there is no appearance of his being under the influence of opium.

Feb. 5th.—He passed a worse night. The spasms in the quadratus lumborum and abdominal muscles recurred with greater frequency and violence, and he became irritable and desponding; owing to neglect in their not sending for his medicine, he had been without it for some hours. I immediately increased his dose to m xx . and ordered him to have it every two hours till he slept.

6th.—Found him much better. He has slept for three hours consecutively during the night, and spasms recur at intervals of hours only and are much less violent.

8th.—Spasms continue to occur, at long intervals, in the legs and on the left side. He sleeps sometimes for four or five hours. I continue to give him his medicine every two hours, when he is awake. Pulse has fallen to 90. Appetite good. Bowels have acted without the castor oil.

12th.—He had a slight relapse, but has steadily and slowly improved ever since. Up to the beginning of March, tetanic spasms occurred once or twice a day, sometimes in the legs, sometimes in the sides. He continued to lie on his shoulders and buttocks, the back arched, the legs stretched out as rigidly as ever. The muscles of the jaws relaxed first; about the 6th of March he could eat, though with difficulty, but it was not till the end of the month that he regained any power over the muscles of the legs or back. I continued to give him the opium and chloroform as long as the spasms continued, giving it, however, more rarely as they decreased in frequency. I have been astonished at the quantity of opium this boy has taken. Although, owing to his reluctance, sometimes, to take it, a dose has been occasionally omitted, still for more than a fortnight he never took less than 3ij. of the opium and 3i. of chloroform in the 24 hours. Yet I never saw a single symptom to warn me of any danger from the too free use of opium. On the contrary, although at last he became inclined for sleep, he was always disturbed very easily, and as soon as he awoke his countenance put on the same quick and excitable expression as before.

April 12th.—He is now able to walk with the help of a stick.

I doubt whether the opium, in this case, had any effect on the duration of the disease, but I believe it lessened the violence of the spasms. My own impression is that the free use of opium, in this instance, enabled my little patient to endure his sufferings and to wear them out, and that without it he would, most certainly, have sunk under them.

Folkestone, April 15, 1857.

MODE OF PREPARING THE BRAN LOAF FOR THE USE OF DIABETIC PATIENTS.

By JOHN M. CAMPLIN, F.L.S. &c.

In Dr. Garrod's recent lectures before the College of Physicians, when discussing the treatment of diabetes, the Dr. referred to my paper on the juvenia and lædientia in diabetes, (Medico-Chirurgical Transactions, for 1855,) and expressed his opinion that the bran cake for which I have given directions, was by far the best substitute for bread with which he had become acquainted. Having since the publication of that paper made improvements in the preparation of this important dietetic agent, I now present the amended formula to the profession, in the confident expectation, that as it will now be more extensively known, it will soon be in general use in our hospitals, as well as in

private practice. If a proper mill for grinding the bran is obtained, it may be easily prepared; (a) it is by no means unpalatable, and as it contains scarcely any starch, (b) it at once checks the formation of sugar, and arrests the whole train of morbid actions.

The formula I now use is as follows:—

Take a sufficient quantity (say two or three quarts), of wheat bran, boil it in two successive waters for ten minutes, each time straining it through a sieve, then wash it well with cold water (on the sieve), until the water runs off perfectly clear; squeeze the bran in a cloth as dry as you can, then spread it thinly on a dish, and place it in a slow oven—if put in at night let it remain until the morning, when if perfectly dry and crisp, it will be fit for grinding. The bran thus prepared must be ground in a fine mill, (c) and sifted through a wire sieve of sufficient fineness to require the use of a brush to pass it through; that which does not pass through at first, must be ground and sifted again, until the whole is soft and fine.

Take of this bran-powder 3 ounces, Troy, 3 fresh eggs, 1½ ounce of butter, rather less than half a pint of milk; mix the eggs with part of the milk, and warm the butter with the other portion; then stir the whole well together, adding a little nutmeg and ginger, or any other agreeable spice. (d) Immediately before putting into the oven, stir in first 35 grains of sesquicarbonate of soda, and then 3 drams of dilute hydrochloric acid. The loaf thus prepared should be baked in a bason (previously well buttered), for about an hour or rather more. (e)

Biscuits may be prepared as above, omitting the soda and hydrochloric acid, and part of the milk, and making them of proper consistence for moulding into shape.

If properly baked the loaves or biscuits will keep several days, but should always be kept in a dry place, and not be prepared in too large quantities at a time.

I would refer your readers to the paper already alluded to, for the circumstances under which I was led to the use of this preparation, and do this with the more confidence, as subsequent experience establishes the importance of the bran-loaf as a remedial agent, and confirms my general opinions on the treatment of diabetes.

33, Compton-terrace, Islington, N.

P.S. The bran biscuit may be purchased of Mr. Smith, baker, of Gower-street North, and a bran loaf or cake, nearly resembling the above, of Mr. Blatchley, confectioner, near the Pantheon, Oxford-street; both these parties prepare a biscuit or cake which answers well medically, but is not so agreeable as that prepared under my own direction. The difference is probably owing in a great measure to their not having hitherto used mills of sufficient fineness. I have reason to expect that they will henceforward remedy this defect.

(a) The grinding of the bran, which is the only part of the preparation requiring labour, might be performed in most of the Hospital cases by the patients themselves.

(b) Gluten bread, if prepared with care to wash away the starch, is excessively disagreeable, and cannot be persevered in for any length of time. The French gluten bread is not so disagreeable as that which I have had made at home, or which has been prepared for me by our best Pharmaceutical Chemists, but contains 20 per cent. of starch (according to Bouehardat), whilst a specimen of bran prepared as here directed was found by Dr. Marcet to contain only two and a half, and of course the whole loaf contains scarcely 1 per cent.

(c) The mill I use was made by Mr. White, of Holborn.

(d) The mixed spice sold in powder by the grocers answers very well, or a few caraway seeds bruised, where economy is an object.

(e) A specimen of the bran loaf thus prepared was exhibited at Dr. Garrod's lecture, and tasted by the Physicians and Medical Practitioners present, who expressed themselves very strongly as to its pleasantness.

POPULATION OF RUSSIA.—The population of Russia does not increase. The statistical reports of the *Central Medical Journal* show that even in the two capitals of late years the numbers of deaths greatly exceed those of births. Thus in 1855 there were in St. Petersburg, 26,727 deaths to 16,092 births; in Moscow, 13,784 deaths to 9,889 births. The statistics of the whole empire for 1854 show, it is true, a more satisfactory result, viz., 2,882,155 births and 2,148,233 deaths. Finland and Poland are not included in this statement: in the former the excess of births over deaths was still greater; in Poland, on the contrary, the excess was on the side of deaths. For last year and this, it is to be apprehended that Finland will supply a great excess of deaths, in consequence of the famine.

THE LONDON PRACTICE OF MEDICINE AND SURGERY

REPORT ON VILLOUS CANCER AND POLYPUS OF THE BLADDER.

A very interesting and unusual case is now under Mr. Lloyd's care in St. Bartholomew's, in which the persistence of hæmaturia, without other known cause, has led to the suggested diagnosis of villous polypus of the bladder. The details of this case will be found at page 433, and, although as yet incomplete, it will, we trust, be found to be one of sufficient importance to merit publication even somewhat prematurely. As "villous cancer" of the bladder is an extremely rare affection, it may be instructive to group together a series of these examples of it, which during the last few years have come under notice in the different Hospitals. As far as we are aware, no collection of cases of it has ever before been made, and we hope to be able to deduce from the examination of the following ones some important rules for its diagnosis, and shall venture some suggestions as to its operative treatment. Before proceeding, it may be well to state that there seem to be valid objections to the propriety of the use of the term "cancer," as applied to this affection. There is no evidence that the growth ever appears in other than its original location, or that it induces any degree of malignant cachexia. In its mode of growth, also, it does not assimilate itself to the other forms of cancer; it does not invade adjacent tissues, does not ulcerate, does not slough. In fact, it resembles far more nearly in mode of growth an innocent polypus than a cancer. A tuft of "villous cancer" looks remarkably like a large mass of the shaggy chorion attached, by a more or less constricted peduncle, to a healthy surface of mucous membrane. It is so loose in texture that, when out of water, it collapses into a comparatively small bulk; but, when allowed to float itself out in fluid, it swells into a large, somewhat globose tuft, finely fringed in all parts, and looking like a bunch of one of the delicate coralline sea-weeds. Its extreme tendency to bleed is, as we shall have to see, the most marked symptom of its existence.

For the reasons just stated we shall prefer in the following report to designate the disease as *villous polypus*, instead of "villous cancer;" a name more closely designating its pathological character. With regard to the feature chiefly expressed by this name, it is, however, necessary to explain that it is present in very different degrees in different specimens. In some the growth resembles a solid polypus fringed over its surface by delicate villi. In others a patch of isolated villi grows directly from the mucous membrane, without any polypoid base whatever. In a third, and the typical class of cases, the growth is a pedunculated tuft of loose, shaggy texture, with little if any solid material. Then, again, in some specimens, one part of the tumour is villous, and others covered only by healthy mucous membrane; and in some the prolongations are thick and dense, resembling rather mamillary eminences than true villi. All these varieties will be found exemplified in the series to follow. To have excluded all, excepting the cases in which the tumour was an unmixed specimen of the villous growth (as in Case 3), would have been to greatly limit the practical usefulness of the report, and at the same time to adopt an arbitrary pathological classification.

KING'S COLLEGE HOSPITAL.

Case 1.—HÆMATURIA WITHOUT OTHER SYMPTOMS —DEATH FROM CHOLERA—VILLOUS POLYPUS IN THE BLADDER.

(Under the care of Mr. PARTRIDGE.)

A few days ago Mr. Partridge mentioned to his class the particulars of a case which had been in the Hospital some years before. The patient, a middle-aged man, had suffered from constant liability to hæmaturia. He was not in

bad health, had no pain, and, beyond the bleeding, had no indications of bladder or renal disease. The bladder was repeatedly and carefully examined for stone, but none could be detected. After a time he left the Hospital, but was subsequently attacked by cholera, of which he died. At the autopsy there was found in his bladder a pedunculated villous polypus, around which the mucous membrane was sound. No other visceral disease was discovered.

By the kindness of Mr. Partridge and Mr. Quekett the writer has had an opportunity of examining the bladder from this case, which is now at the Royal College of Surgeons. The specimen is a good one of a pedunculated polypus, covered with long villi over its whole surface. A coloured drawing of the preparation shows that when fresh the villi were very florid and congested. The whole mass when in water occupied a bulk of about the size of half a walnut. The pedicle is not of greater thickness than a crow-quill, and is attached with the trigone. The mucous membrane of the bladder generally is perfectly healthy.

THE MIDDLESEX HOSPITAL.

Case 2.—VILLOUS POLYPUS OF THE BLADDER, HÆMATURIA, ETC.—SYMPTOMS FOR MORE THAN A YEAR—DEATH.

(Under the care of Mr. SHAW.)

A woman, aged 18, was admitted in the early part of 1853, on account of urinary symptoms. After a stay of about five weeks she left apparently recovered. In January, 1854, she was again admitted. The pain suffered in micturition was now extreme, and the urine, besides being loaded with mucus, generally contained blood. Often after straining nothing but blood was passed. The pain she complained of was chiefly situate in the back and over the pubes. Her death occurred early in February, having been preceded by the most excruciating suffering in connexion with the difficulty of passing her urine. The bladder had been carefully examined with the sound, but no stone could be detected. At the autopsy the bladder was found contracted, and the urethra, which was large, was plugged with a soft substance, which proved on opening the viscus to be the most projecting part of a growth of villous cancer. The tumour was about the size of a chestnut, solid in its centre, but shreddy and villous over its exterior. It was connected with the right side of the bladder by a pedicle, consisting of a broad, flat, and thick band. It was quite pendulous. On microscopical examination (Mr. Sibley), it proved to be exactly like other villous growths on its surface, while its solid part consisted only of fibrous tissue, and had none of the elements of cancer. Both kidneys were much congested, and the lining membrane of their pelvis and calices showed flakes of lymph. In the walls of the uterus was a small fibrous tumour.

Case 3.—VILLOUS POLYPI OF THE BLADDER—HÆMATURIA, &c. —SYMPTOMS FOR THREE YEARS—DEATH.

(Under the care of Dr. STEWART.)

An unmarried woman, a milliner, was admitted under Dr. Stewart's care into the Middlesex Hospital in February, 1855, on account of urinary symptoms. Two years before this she had been seized rather suddenly with pain in passing water, which was accompanied by some aching in the loins, and the appearance of a large quantity of blood in the urine. Since that occurrence she had experienced others of like character, but in their intervals had enjoyed fair health, and been able to attend to her occupation. At length, however, the symptoms increased in severity, the urine constantly contained mucus and often blood, and she was obliged to leave her situation and seek admission as an in-patient at the Hospital. She remained under Dr. Stewart's care for about a year before her death, which took place in February, 1856. At intervals during this time she had been comparatively free from suffering, but during the last four months hæmaturia had been almost constant. She sank under the exhaustion of the pain and continued hæmorrhage. At the autopsy the

principal disease found was a large and remarkably well characterised villous polypus. It was about the size of a goose egg when floated in water, of a bright red colour, and exactly resembling a mass of chorion. Its base was constricted, and the mucous membrane around it, excepting being congested and thick, was not diseased. On each side of the growth was a smaller one of similar character. The coats of the bladder were much thickened, and the ureters dilated. The kidneys were larger than natural, and contained numerous small abscesses in their cortical layers. The other organs of the body were healthy. (For a minute description of the microscopic character of the growth, the reader is referred to Mr. Sibley's paper, in the seventh volume of the Pathological Transactions.)^(a)

ST. BARTHOLOMEW'S HOSPITAL.

Case 4.—LARGE VILLOUS (?) POLYPUS IN THE BLADDER OF AN INFANT.

(Case under the care of Mr. STANLEY.)

The particulars of this case having been recorded in full detail, and with some excellent comments by Mr. Savory, in a former volume of this Journal ^(a), we shall here only mention its chief facts very briefly:—A sickly infant, aged 13 months, was brought to Mr. Stanley in March, 1851, suffering from the symptoms of stone in the bladder. It was said to have been ill eight weeks. A few days after admission an abscess in the abdominal wall required to be opened, and from this urine continued ever after to escape. The child sank about three weeks after it had first come under notice. During the last few days of life the urine flowed solely by the umbilicus, none escaping by the urethra. It was found after death that a large, soft, pedunculated polypus occupied the bladder, and had occluded, as a valve, the orifice of the urethra. The urachus had been reopened by the endeavours to pass the urine, and an abscess having formed, a communication between the fundus of the bladder and the umbilicus had been established. Mr. Savory's description of the tumour is as follows:—“Some portions of it resembled lobules of common fat, others being more translucent appeared like clusters of hydatids. In minute structure it closely resembles mucous membrane, being chiefly composed of the several elements of that tissue. Mr. Paget describes it as presenting an interior substance, composed in part of very fine filamentous fibro-cellular tissue, and in much greater part of granular or dim homogeneous substance with imbedded nuclei. Over these was an immense quantity of tessellated epithelium, with well formed and large scales, like those of the mouth. The epithelium was by far the most abundant constituent of the small lobes of the polypus.” The kidneys were congested and the bladder thickened, and in the right kidney were two or three spots of commencing suppuration.

Case 5.—LONG-CONTINUED HÆMATURIA, WITH PARTIAL PARALYSIS OF THE BLADDER.

(Under the care of Mr. LLOYD.)

Mary Ann H., aged 39, is an unhealthy-looking and somewhat emaciated woman. Her aspect, although pale, does not resemble that of malignant cachexia. She is married, and has borne nine children, her symptoms dating back from her last conception, which ended in the third month in an abortion. Up to the time of this occurrence, which was brought on by a severe fright, she states that she was stout, and always enjoyed good health. It occasioned the loss of much blood, and was followed by an illness, which kept her for nearly nine months confined to her bed. This was in May, 1853. After recovering she went to the Colchester Hospital, on account of what she describes as ulcers in the vagina, for which, on two occasions, what she considered “operations” were performed. She was fourteen weeks in the Hospital, and left it quite well as regards the vagina, but with the new symptoms of frequent inability to pass her water, and occasional hæmaturia. Seven months after her discharge she was again admitted into the Colchester Hospital, but after a short stay was dismissed, having been told that she had a “bleeding tumour in the bladder, for which there was no cure.” From

^(a) Both this case and the preceding one have been recorded in the Transactions of the Pathological Society.

^(a) See Medical Times and Gazette for July 31, 1852, page 107.

the date of her first discharge to that of her admission under Mr. Lloyd in St. Bartholomew's a few weeks ago (a period of three years), she states that she has always required the use of the catheter twice daily. At first a Surgeon used to introduce it for her, but having been taught to introduce the instrument she has for a long time used it herself. Her bladder was repeatedly examined for stone, but none could be detected. She does not describe the pain suffered as having been very severe, and believes that there is a sore place in the right side of the organ, from the sensation caused when the point of the instrument touches it. With regard to the inability to void her urine, she states that it has been almost constant, but that sometimes when able to pass it she has noticed the stream stop suddenly. A day has rarely passed in which no blood appeared in the water, but it has never been in any very great quantity. She has suffered occasionally from prolapse of the rectum. For several years she has been lame in her left leg, and had the knee somewhat contracted, but how far this is to be accounted for by the presence of a pin beneath the skin on the outer side of the joint, which Mr. Lloyd discovered and removed, is doubtful. She had not known of the existence of the pin, but thought it must have been there for a long time. Within a short time after her admission into St. Bartholomew's she became able to pass her water voluntarily, and on some days it would be clear and free from blood.

Great obscurity attaching to the case, the suggestion having been made that very possibly there might be a growth of the so-called villous cancer in the bladder, which, if discovered, might possibly be accessible to operation for removal, Mr. Lloyd determined to dilate the urethra, and examine the interior of the viscus with the finger. This was done on the 22nd. After a few minutes' use of Weiss's dilator the urethra very readily admitted the forefinger, which passed its full length, and moved with great freedom. The bladder was ascertained to be enormously dilated, and without the slightest degree of contractile power. Its walls felt extremely thin, but no roughness or ulceration of the mucous membrane could be detected in any part. At its sides there were pouches, to the extremities of which the fingers could not be made to reach. At its anterior part, that is, behind the pubes, the mucous membrane hung very loosely forwards, and felt exceedingly soft, but the sensation given to the finger was rather that of a smooth surface than of the villi of a distinct growth.

The effect of the examination was in no way injurious, and the patient has suffered rather less than more since it was made. We believe that Mr. Lloyd contemplates making a second one before long, and employing a reflecting speculum, so as to get a view of the interior of the bladder.

The best commentary we can make upon the case will be to place in juxtaposition with it the following, which appears to have almost exactly resembled it. In some very valuable "Cases in Surgery," published about a century ago, by Mr. W. Warner, then Surgeon to Guy's Hospital, is the subjoined narrative:—

"Mary B., aged 23, on the 24th of June, 1747, strained herself by endeavouring to lift a great weight. She was immediately seized with pain in the small of her back, and a total suppression of urine, which symptoms, notwithstanding the several methods used for her relief, continued till the 29th of the same month, when an eminent Physician and man-midwife was called to her assistance, who drew off her urine with a catheter. In April, 1750, (nearly three years after,) she applied to me. Upon inquiry I learnt she had never been able, from the moment of the accident, to void a drop of urine without the assistance of the catheter, which had ever since been made use of two or three times in the twenty-four hours. She had often lost blood in considerable quantities." Having examined with the finger, Mr. Warner detected a polypus of some size, which easily projected into the urethra, growing from near the neck of the bladder. Having determined to attempt its removal, the patient was prepared as if for lithotomy. An incision in the left side of the urethra having been made, the mass was held forwards by a thread passed through it, and a ligature was applied to its base. On the sixth day the tumour, which is described as the size of a turkey's egg, came away. The patient recovered perfectly. No description of the structure of the tumour is given.

(This Report to be concluded, and with Comments, next week.)

THE DREADNOUGHT HOSPITAL SHIP.

INUNCTION OF IODINE IN CASES OF LEAD Palsy.

(Case communicated by Mr. F. M. CORNER.)

M. M. aged 36, admitted into the Dreadnought July 3, 1856, suffering from concussion of the brain, and a severe injury to the leg, for which amputation below the knee was performed. He remained unconscious for three weeks, and on his recovering sensibility he complained of numbness in both hands, but no want of motor power. This symptom gradually passed off, and he left the Hospital 8th October convalescent, but with a large granulating wound over the stump, which was being treated with emp. plumbi. A week before Christmas he discovered one morning that he was unable to raise the right hand, and had some difficulty in extending the arm from the side. He continued in this state till January 17, when I first saw him. It was discovered on the onset of the paralysis that he had a distinct blue line on the margins of the gums, and that the water consumed by him for the previous ten weeks traversed a leaden pipe, and was impregnated with the metal. He had been treated with mag. sulph. and sulph. acid with no benefit. I first ordered five grains of the iodide of potassium three times a day; galvanism to be used twice a week, and friction over the paralysed muscles. He continued this treatment for a month, with no perceptible improvement. He was then ordered ung. iodini co., to be well rubbed in over the extensor muscles night and morning, and in consequence of his complaining of neuralgic pains in the face, quina gr. ij. ter die. In a few days he felt his arm better, and in a week he could extend the hand with perfect ease; and after three weeks the paralysis was entirely gone, and his general health was much improved. There is still a narrow blue line on the gums, but he presents no other signs of the presence of lead in the system.

The important point in treatment illustrated by the above case, is the employment of inunction of iodine directly over the paralysed muscles, in preference to its exhibition by the stomach. A remedy so easy of direct absorption by the skin, might fairly be expected to more readily obtain access to the affected muscles by that method of use. The result of the case bears out the opinion, and is at any rate sufficiently encouraging to induce further trials of this mode of practice. It may be accepted as an acknowledged fact, that in lead-palsy the loss of function is from the actual presence of the mineral in the affected muscles. The mode in which the iodides act in curing it is also believed to be from the chemical combination with the poisonous salt, converting it into a soluble one, and favouring its elimination. The practical problem therefore plainly is to bring the remedy and the lead into effectual contact in the most direct and speedy manner.

CASE OF CROUP, IN WHICH TRACHEOTOMY WAS PERFORMED.

(Communicated by Mr. F. M. CORNER.)

On March 28, 1857, I was called to a case of croup in *extremis*, and having represented to the parents that an operation was the only chance of saving the child (a fine boy, 4 years old, who had been suffering three or four days from the disease), I at once performed tracheotomy, opening the tube as low down as possible, and making a long incision. A few minutes afterwards a large piece of solid fibrine, about an inch in length, and moulded as if from one of the bronchi, was forced into the opening and removed; after which the child gradually came round, improving in every way, and at the end of an hour and a half, while meditating on introducing the canula, the child suddenly, and without cough or other symptoms, became suffocated, and died. Nothing could be seen at the opening, and a pair of forceps (dressing) passed downwards failed in discovering the cause. I imagine a large piece of false membrane had become detached, which occluded the trachea low down. A small quantity of a mixture of equal parts of brandy and arrowroot had been given frequently after the operation, reaction had come on freely, and the respiration, though still a little laboured, was greatly relieved. No post-mortem obtained.

HOSPITAL NOTES.

SENEGA IN CASES OF HEART DISEASE.

Dr. Barlow remarked the other day to his class at Guy's respecting the usefulness of senega in chronic bronchitis, that he had noticed it to be of especial benefit in those cases in which the pulmonary affection was complicated by aortic valvular disease. It had come to be a clinical rule with him in all cases in which the pulse indicated regurgitation to order this remedy, and he almost always found that it acted with much greater efficiency than in instances of simple bronchitis. The formula ordered was an ounce of the decoction of senega with half a drachm of nitric ether every four hours.

CASES OF PELVIC INFLAMMATION AFTER PARTURITION.

Dr. Risdon Bennett recently attracted our attention to a case under his care in St. Thomas's, in which a large swelling in the iliac fossa, attended with all the signs of abscess, is undergoing cure by absorption. The patient was confined to her bed, and allowed a nutritious diet, with tonics. At one time it seemed about to point externally, and no fluctuation had ever been distinguished. There is a case of similar nature also under Dr. Oldham's care in Guy's which is undergoing a like process of cure. In both the patients are women who have recently been confined. Dr. Bennett and Dr. Oldham, in respect to these cases, both expressed their belief in the possibility of the absorption of pus; and, without giving any positive opinion as to whether matter had actually formed, each thought it very probable that a small quantity had been so. The not infrequent occurrence of the absorptive removal of collections of matter, is a fact, we believe, now generally admitted by those of experience.

REDUCTION OF OLD IRREDUCIBLE HERNIÆ.

Mr. Lloyd has a woman under treatment in Lucas Ward, in whose case the plan of reducing old herniæ by the long-continued application of ice is being pursued. Cases of this class do not often come under treatment. We have been recently informed of the particulars of one such, which occurred several years ago, in which a Hospital Surgeon was bold enough, not to say rash enough, to operate, opening the sac, and cutting away a mass of omentum, which had long been irreducible. Fortunately the patient recovered. She was a healthy woman from the country, and had suffered great annoyance from her rupture. Mr. Lloyd's is just such another case. The woman is of middle age, has been subjected to much inconvenience from a large omental hernia on the left femoral region. It has been irreducible for many months. She is kept in bed, and a bladder, containing pounded ice, is applied as frequently and for as long periods as she can bear it without discomfort. The plan has now been in progress about a month. The mass has become much softer and looser, and Mr. Lloyd fully expects to be able soon to return it. We would direct the attention of St. Bartholomew students to the case as one well worthy of being impressed on the memory, and very likely to be useful in their future practice. The plan of treatment is one which many years ago used to be adopted by Mr. Lawrence, and some interesting papers in high commendation of it appeared in one of the French journals about fifteen years ago, from the pen of M. Malgaigne. Malgaigne's practice was to restrict the patient to a very small quantity of food, so as by a kind of starvation to diminish the bulk of the protruded omentum, while at the same time cold was used locally. A case, under the care of Mr. Hilton, in Guy's Hospital, in which this plan was pursued with complete success, may be found recorded in our Hospital Reports for May 28, 1853, and another under that of Mr. Lloyd, at page 237, for September 8, 1855. The latter Surgeon thinks that, in a general way, the starvation part of the treatment may be dispensed with. In cases, however, which may have resisted the use of the ice, it is well that it should be borne in mind.

CASE OF SUSPECTED VAGINAL THROMBUS.

Dr. Oldham admitted into his ward at Guy's, the other day, a case in which a large swelling of somewhat peculiar character occupied the left side of the vagina. It was large and bulging across the median line, very tense and elastic, and presenting somewhat the character of a pelvic abscess. In its painlessness, and the entire absence of febrile symptoms, it however differed very much from what is usually noticed

in connexion with collections of matter in the pelvic fossa. It was not tender to the touch, and there was no perceptible swelling in the iliac fossa above. The patient, a middle-aged married woman, the mother of several children, had been confined about six weeks ago, and had noticed the swelling for the first time two weeks afterwards. She had not had rigors, and the swelling had increased without much pain, and without causing any œdema of the leg or other inconvenience. She had walked to the hospital, and had been about her domestic duties at home. Dr. Oldham mentioned, in connexion with the case, one which he had recently attended in private practice, and in which a swelling which appeared to fluctuate, and which was situate in the vaginal wall, had proved on opening to contain only fibrin and blood-clot. In it, like the Hospital one, the patient had been confined a few weeks before. He believed it to have been an example of vaginal thrombus, and suspected that in the present instance the swelling, although much larger, was of the same nature. The absence of the usual symptoms of inflammation, both local and constitutional, was altogether opposed to the idea of the swelling containing pus. Yet there was little doubt as to there being at one part a distinct sense of fluctuation. He suspected if a puncture were made that a small quantity of fluid blood and much solid coagulum and fibrin would be found. The extravasation had probably taken place during labour from the pressure of the child's head, and had increased after the patient had left her bed. We shall notice the case again at some future time.

EXPECTED OPERATIONS.

At King's College, on Saturday, Mr. Fergusson will perform excision of the knee-joint, the removal of a large bony growth from the lower jaw, and an operation for hare-lip. Mr. Bowman intends to ligature the femoral artery in a case of popliteal aneurism.

THE PROVINCIAL
PRACTICE OF MEDICINE AND SURGERY.

SALFORD ROYAL HOSPITAL.

LITHOTOMY BY THE PROCESS OF FRÈRE
JACQUES.

(Under the care of Mr. THOMAS WINDSOR.)

DAVID BERRY, aged 11, admitted with ordinary symptoms of stone in the bladder.

April 2.—The lad being in the ordinary position and under chloroform, the forefinger being introduced into the rectum, the point of the knife was entered between the anus and the tuber ischii, but rather nearer the former, and passed deeply through the ischio-rectal fossa to near the prostate; then, by cutting upwards, and at the same time withdrawing the knife, the first incision was made; the urethra was then opened, and the operation terminated in the usual manner.

There was some little difficulty in seizing the stone, which was bean-shaped, weighing a little more than two drachms, and composed of lithic acid; the loss of blood was very trifling.

The after-course was very simple; little reaction followed; the urine flowed freely through the wound, until April 10, when it definitively ceased; and on April 16 he was discharged, the wound being nearly closed.

Remarks.—This case is published merely as exemplifying a method of performing the ordinary operation, but seldom used; curiously enough, however, such was the manner in which Frère Jacques, the promulgator of the common or lateral operation, performed lithotomy; a similar method was used, and strongly recommended by Sir Charles Bell (a).

In the ordinary operation, the points of commencement and of termination of the incision are comparatively undefined, the urethra is often opened too far anteriorly, and the bulb and rectum run considerable danger of being wounded.

By this modification, the finger in the rectum marks the

point, just in front of the prostate, at which the urethra should be opened, and at the same time the situation of the rectum; the eye marks the position of the ischium; and as the knife is gradually withdrawn, as it passes forwards, there is but little danger of wounding the bulb or its artery. It is evident, that the wound can be thrown well back without danger to the rectum; hence at the same time that we give a free, dependent exit for the urine, we have the wound situated in the widest portion of the outlet, between the tuberosities.

Hence, compared with the common method, we may say, that by the process of Frère Jacques, the rectum, internal pudic and artery of the bulb, run less danger of being wounded; that the wound can safely be thrown further back, so as to allow a more easy extraction of the stone and a free discharge of urine.

Why has this method been generally abandoned? Probably because, to the mass of Surgeons, such practice appeared too bold, and far less easy of performance than cutting down on what they could feel through the perinæum.

NOTES AND QUERIES.

We that questioneth much shall learn much.—*Bacon.*

No. 205.—SERJEANT-SURGEONS.

Where can I find a list of the Sergeant-Surgeons to our Sovereigns from the first appointment to the present time?

C. H.

ANSWERS.

No. 198.—JOHN FACEBY.

I am not aware of the existence of any biographical memoir of John Faceby, one of the three Physicians called into attendance upon King Henry VI. Indeed but little is now known concerning him, and the following extract from Johnson's *Life of Linacre*, 8vo, Lond., 1835, while supplying some, will, I fear, go but a short way towards affording all the information required by your Maltese correspondent, A. G. I give the passage *in extenso*, believing it will not be devoid of interest to those among your readers who are studious of information concerning the early history of physic and physicians in this country.

"The earliest mandate or warrant for the attendance of a Physician at court which the writer has been able to discover is dated 33 Henry VI., a reign fertile in the patronage which was afforded to practitioners in medicine; but in that reign no appointment existed which can justly be called Physician to the royal person. By this warrant the king, with the consent of his privy council, deputed to three Physicians and two Surgeons the regulation of his diet, and the administration of such medicines and remedies as might be sufficient for his cure, without any allusion to the previous existence or permanency of the office which they were authorized for a time to fill, or to a remuneration for their services. (Cotton MSS., Vespasian, G. xiv. p. 415.) The Physicians were John Arundell, John Faceby, and William Hatcliffe; the Surgeons, Robert Warren and John Marshall. The medicines and means of cure which they were to employ are specifically enumerated in the warrant, and present a formidable regimen to which the royal patient was by permission or sanction of his council to be subjected. They were potiones, syrapi, confectiones, laxativæ medicinæ, clisteria, suppositoria, caput-purgia, gargarismata, balnea, epithemata, embrocationes, capitis rasura, unctiones, emplastra, cerota, ventosæ cum scarificatione vel sine, hæmorrhoidarum provocationes, etc. What was the nature of the malady, or what the reward of the efforts for its cure, does not appear. The king seems either to have been dissatisfied with the treatment which was adopted, or to have desired that spiritual consolation in conjunction with Medical advice, which could only be afforded by an ecclesiastic. In the following year, when he was seized either with a new disease, or an accession of his former complaint, he issued an order under his privy seal at Westminster requiring the attendance of Gilbert Kemer, Dean of Salisbury, an expert, notable, and proved man in the craft of medicines, and in whom, amongst all others, the royal affection and desire is stated right specially to have been set. Whether this ecclesiastic was more successful in his practice than his

predecessors is very doubtful, although he enjoyed the confidence of his royal patient not less as a Physician than in his more proper character of a divine."

The variations in the orthography of names in the fifteenth century render it difficult to identify the individuals mentioned in the writs of this period, but John Faceby, apparently the same with John Faceby, one of the Physicians to whom the warrant of the 33 Henry VI. was directed, was rewarded four years afterwards with the reversion of an annual grant of fifty marks charged upon the prior and convent of St. Augustine, in Canterbury; and William Hateley, probably an alias or misnomer for Hatcliffe, had in the following year a grant, under a writ of the privy seal, of the rents and profits of the Foss dyke, in Lincolnshire, of which county he was a native, in return for the services which he had professionally rendered and wished still to render to the king and queen.

The nature of these remunerations, coupled with the length of time that elapsed between the attendance and the several grants, is at variance with a fixed salary and a permanent or individual appointment. The many names which are in this reign found in occasional attendance upon the king, and the consequent assumption of the title of Physician to the royal person, also militate against their existence. No writs are extant which conferred these advantages exclusively, and remunerations similar to those made by Henry VI. are common during the reigns of Henry VII. and VIII. In the books of accounts of these kings no mention is made of any regular allowance to the Physicians of the court. The person whose services were required was summoned by an order either signed by the king himself, under his sign manual and privy seal, or under those of his minister, and discharged at the termination of the disease, with such remuneration as the length of his attendance, his skill, or the munificence of his sovereign might award. In more than one document of this kind a distinction sufficiently broad is drawn between the rank and office of the Physician and those of the apothecary; the services of the former are usually stated to have been paid *in reward*, a term expressive of an *honorarium*, or gift, and not like those of the latter in the form of a legal demand.

I may add that the William Hatcliffe above-mentioned was one of the foundation fellows of King's College, Cambridge, and eventually secretary to King Edward IV. Of John Arundell my collections supply no information.

April 13, 1857.

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Medical Times & Gazette.

SATURDAY, MAY 2.

DISINFECTION.

"A Minute of Information" on Disinfection, prepared for the Board of Health by Mr. Lindsay Blyth, supplies an excellent text for an editorial discourse. The subject is one which has long called for scientific discussion. It is one on which the people are very ill informed, and regarding which they naturally look for information to their Medical instructors. When the Medical man is asked what is the best disinfectant, and what the best deodorizer, the answer is simple—"Perfect cleanliness." If he is asked for some tangible substance which will disinfect, he may shake his head,

and act well by the act; if he is learned in chemistry he may copy Mr. Blyth, and give a certain affirmative answer, as follows:—The infective material, whether arising from the sick man or from decomposing organic matter, is an organic compound, “declining by successive transformations from a highly complex form into that state of ultimate chemical repose which belongs to complete oxidation. Its dangerous qualities are dependent on its condition while passing through these steps of transition, during which it acts after the manner of a ferment.”

When the Esculapian has drilled into his listener this principle, and has skilfully avoided the questions, At what stage of the transition does the specific infective material exert its specific influences? whether during the transition more than one infectant is produced? whether the organic compound is itself a disinfectant? and what it is organically?—he may pass to *disinfectants*, and explain that these are of two classes—“first, those which fix the organic matter in a form unfavourable to oxidation, and thus reduce to the utmost its tendency to undergo chemical change; secondly, those which more or less rapidly break up the organic matter by promoting its oxidation and its conversion into unputrifiable products.”

Then may he go on, and, displaying deeper furrows of Mr. Blyth’s ploughing, may explain to his entranced listener that the disinfectants which restrain the decomposition of organic matter, and stop the oxidation, are called antiseptics; and that antiseptics include, first, the vacuum; secondly, perfect dryness; thirdly, a boiling heat; and, fourthly, various chemical substances which prevent decomposition.

Further, he may electrify his auditor by comparing an infecting agent to a leg of South Down, and may show, by explaining how such leg is pickled, how also the infectant may be pickled. Is the infectant in clothes? it may be pickled by heat: is it in refuse animal matters? it may be pickled with creosote, sulphurous acid, or metallic salts. This system described, he may go in for the rapid breaking up of the infectant. He may explain that nitric and nitrous acids are valuable in this sense: that the manganates and permanganates have been used for the same purpose; that fire is the most perfect oxidizer; that chlorine owes its efficacy to its propensities for hydrogen, thus allowing the agents with which the hydrogen is combined to re-arrange themselves and become oxidized; that quick-lime, from its avidity to pass into the state of a neutral salt, induces an organic body in contact with it to absorb oxygen from the air, and is thus a deoxidizer; and, lastly, that charcoal, has the power of absorbing and condensing various gases within its pores, of bringing them within the sphere of their mutual attractions, and in some cases determines the destruction of certain gases.

Such are the points of chemical knowledge with which the Medical man might interest his inquirer; and very thankful he might be to Mr. Blyth for the condensation of so much matter into so little space. But after all, is there, with the exception of heat, any such an agent as a disinfectant? Whatever chemical science may teach on this point theoretically, we should certainly require a little more proof practically before we accepted the chemical deduction. We would repeat a question, after the manner in which we have questioned before, and ask, Can twenty well-authenticated proofs be adduced in which either nitric acid, the manganates, chlorine, quick-lime, or charcoal, have positively and demonstratively stopped the progress of any infectious disorder? We would ask, not for captiousness sake, but for information, What demonstrative proof is there that an infectant is an organic compound passing through certain series of changes, during which it acts after the manner of a ferment? The idea, it may be, chimes in with chemical laws, but does it

chime in with physiological and pathological laws also? When a dose of organic poison, say small-pox virus, is introduced direct from one animal body to another, what chemical changes are elicited? Will any of the so-called disinfectants, barring heat, reduce the infectant power of such virus? These are questions for the Physiologist.

In regard to the last of these points it is worthy of note, that such agents as act as antiseptics on dead organic matter do likewise prevent the decomposition of infecting virus. Thus small-pox lymph, by being excluded from air, or by being exposed to creosote, or to the vapours of chloroform, or to sulphurous acid, may be kept for a long time in a condition ready for use, and may be employed with effect. In so far as this fact goes, it supports by analogy the chemical view. On the other side, the view is also supported by the fact, that the exposure of infecting virus to a temperature of 212° Fahr. destroys the infecting force. But this is only analogical evidence, on which no principle can ever be accepted, or be expected to hold firm ground for any certain length of time.

Do we press this point too closely? Let us see. While great epidemics rage, the people always place great faith in disinfectants. They prefer chloride of lime to the fresh air. They would rather hang rags on the bed-room walls than open windows. There is something visible in a rag, there is nothing tangible in opening a casement. Now is it not important for the Profession to be able to say whether or not these so-called disinfectants so eagerly sought after are really disinfectant?

Moreover, regarding the application of gaseous disinfectants in the sick room, another point starts up. Is it well to mix the air of any room with a gas, which, to say the least of it, is not natural to the process of respiration? Are disinfectants without their dangers, granting their advantages? Let those answer by facts who can.

Indirectly, the subject here discussed bears on something more. The idea of a ferment, and of the oxidation of organic infective material, supplies the idea of a special class of diseases called *zymotics*. Now it is much easier to implant in medicine a new term than to uproot such a term when it is once implanted. We have a term in this *zymosis*, which is becoming standard with us. Is the idea on which this term is based itself based on good analogical argument? If it is, let us hear the argument, for it has never been spoken yet; if it is not, let us by no means send down this term as a bugbear to the next generation.

Among the questions above suggested there is not one that might not be answered shortly by the experience that is to be gathered daily in the great hospital field of London. In some of our Hospitals, according to Mr. Blyth, an apparatus for disinfecting by heat is at the present time in use, under the name of Teake and Johnston’s apparatus. The principle here employed is for disinfecting clothes, which are so placed in chambers of masonry or metal that their entire surface is subjected for an hour to a heat of not less than 212, and not more than 250, degrees Fahrenheit.

THE WEEK.

We beg to draw especial attention to an important paper published among our Army Medical Reports this week. Dr. Gordon’s description of one cause of tapeworm in India is most interesting, and affords a lively illustration of the effects of eating unwholesome animal food. It is melancholy to think that our sons and daughters, and their descendants for many generations, must, if they go to the Bengal side of India, feed upon baby tapeworms in the shape of *cysticerci*, and that when they innocently indulge in their cutlet and tomato sauce, their stewed fowl and mushrooms, or the ever-forgotten dish at all Indian parties, turkey and ham, not to

speak of résoles and croquets, and the many other dainties prepared to stimulate the palate of an old dyspeptic, they are in fact laying in a stock of a loathsome disease. Fortunate it is, then, that even a temporary remedy, so speedy and so effectual as kameela, has been discovered for a malady which, it is to be feared, must abound in India so long as the present filthy and disgusting habits of the natives remain; and it may be that the habitual use of the medicine may be found to act as a prophylactic, and that a dram of kameela bitters will be considered at Indian banquets as much a necessary after fowl or ham as brandy is in England after goose, whisky in Scotland after fish, or schnaps in Holland after everything.

Dr. Hassall has drawn up for the Board of Health a Report on the Metropolis Water Supply. He shows that the Capital is still supplied with water containing considerable numbers of living vegetable and animal matters, which are not present in the purer waters, as, for example, those supplied by the Plumstead, Woolwich, and Charlton Company. There is at the same time great improvement in the condition of the present supplies as compared with those in 1854. Dr. Hassall gives, as a good test by which the quality of water may be judged, the colour it presents when viewed in bulk in a clear white glass bottle, or in a clear porcelain dish holding about a gallon. If the water thus viewed present any decided tinge or colouration, it in general is not pure. Inspected thus, the waters of almost all the companies presented a very marked yellowish green coloration.

A dispute has been going on between the Spalding Board of Guardians and their Medical Officer, Mr. Ball, regarding the supply of cod-liver oil. Mr. Ball sent a note to the Relieving Officer, stating that a patient named Wright should be supplied with the oil. At a former board it had been agreed, in consequence of Mr. Ball's refusing to supply the oil, that the relieving officer should supply it, and *deduct the price of it from Mr. Ball's salary*. When Mr. Ball found this out he ceased to order the oil, and one of the guardians supplied it to the patient out of charity! Mr. Ball's objection was that cod-liver oil was an article of diet, not a medicine. The guardians closed the debate by referring the matter to the Poor-law Board, inclosing an article from a contemporary, in which it was urged in answer to Mr. Ball, that cod-liver oil *is* decidedly a medicine. Surely the Poor-law Board will not think so ignorantly of physiology as to support a body of men in a mere quibble invented as a scientific excuse for a niggardly demonstration.

The very important subject of the superannuation of Hospital Surgeons has just been brought before the Committee of St. George's Hospital. The proposition that no Surgeon should hold the office after sixty years of age, or after having held it twenty years, has been entertained on the casting vote of the Chairman. The House Committee had not the power to decide the question, but the matter has been referred to a Sub-Committee, and may now be brought before any Special Court of Governors. We have so often given our reasons for believing that after the age of sixty, Hospital Surgeons should be raised to the honorary office of Consulting Surgeon, that we need only express the hope that St. George's may set an example in this respect, which other Metropolitan Hospitals must follow sooner or later.

A Blue book has appeared on immigration into our Australian colonies, containing despatches which throw a new light on the position and duties of surgeons of emigrant ships. The surgeon has to maintain discipline on board these ships. He has the same authority over the passengers that the captain

has over the crew. He must see that cleanliness is maintained both in the ship and among the passengers. It is upon his ability and decision that the rate of mortality during the passage is determined, and this rate, is far higher than it ought to be. In our navy the mortality of seamen on healthy stations is not greater than in an average shore population; yet of three emigrant vessels lately arrived in Australia, the passage being under six months, the deaths were 10, 14, and 15, among a number of passengers under 400 in either ship. If these ships had been in proper sanitary condition as to space, ventilation, cleanliness, and diet, instead of 10, 14, or 15, the deaths should not have exceeded 2 in either ship. The obvious inference is, that the surgeons of emigrant ships should be able and experienced men, and should give proofs of their competence. It is high time that a corps of emigrant surgeons should be formed on a somewhat similar organization to the Medical Department of the Navy.

The Number of the *Quarterly Review* which has just appeared contains an excellent article on Lunatic Asylums. Modern improvements in the treatment of the insane are sketched in a most interesting manner, the benefits of the non-restraint system are fully set forth, and then the writer points out the directions for future reforms. He would doom the large palatial asylums, and substitute the free air or cottage system, already commenced on a small scale at the Devon Asylum, but carried out, as Dr. Webster has shown, for centuries past in the insane colony of Gheel. The necessity and economy of bringing insane paupers speedily under treatment is strongly urged, and, in conclusion, the important question is discussed: "Does mental development mean increased mental decay?" We shall refer hereafter to the facts brought forward to prove that "mental ruin springs rather from mental torpidity than from mental stimulation;" in the mean time, it may interest our readers to know that the article we have referred to is from the pen of Dr. Wynter, and we may take the opportunity of congratulating our Psychological Physicians in obtaining the accession to their ranks of a gentleman so thoroughly conversant with insanity and lunatic asylums as this article proves Dr. Wynter to be.

The roll of the new House of Commons has been completed by the re-election of Dr. Brady for the county Leitrim. The numbers at the close were—

Montgomery	1549
Brady	985
Tenison	588

The contest was a very sharp one. Thus, we have two medical men in Parliament, but it is a curious fact that Dr. Boyd, the new member for Coleraine, was fined twice for acting as an apothecary in Ireland without the licence of the Hall.

We are happy to find that there exists in the sister island a Medical Protective Association for the city and county of Cork, the object of which is to represent to the Irish members of Parliament the wrongs under which the profession labours, with a view of bringing the whole subject of medical grievances before the House of Commons. It is stated by the committee that some of the candidates for seats in the Legislature, and some of the lately elected members of Parliament have promised to advocate the interests, and support the rights and privileges of the medical profession in the British legislature. As in our own island, so in Ireland, one of the prominent grievances is the inadequate remuneration of the Poor-law Medical Officers, and the Cork Association comments also on the hardship under which our profession labours in the entire absence of any retiring pension for those who have devoted their lives to the services of the public as a medical attendant

upon the poor. In one respect, the Poor-law Board in Ireland has an advantage over that in England; for the former has a *Medical Commissioner* always attached to the Board, while in England the medical element is entirely wanting. We hope that other cities and counties, both in Ireland and in this country, will follow the excellent example thus set by our medical brethren in Cork.

On Tuesday evening a Microscopical *Soirée* was held at Apothecaries' Hall. A great number of microscopes was exhibited, the walls of the rooms were covered with coloured diagrams, illustrative of microscopic structures and of various objects of natural history, and the tables were decorated with exotic plants, including palms, ferns, the pitcher plant, and many others. Among the microscopic objects exhibited were—the circulation in the foot of the frog, and in the branchiæ of the tadpole; the partial circulation, or cyclosis, in certain vegetables, the *Chara*, the *Nitella*, the *Valisneria spiralis*, and the plant lately discovered, the *Anacharis alsinastrum*; infusorial and rotiferous animalcules, and various forms of polypifera in a living condition; specimens of micrographic writing and photography, and minute shells and crystals, exhibited both by common and polarised light. In fact, it may be stated that every form of microscope, and every kind of illustration, were to be seen, the whole of the Microscopic Society having been invited, together with all the London manufacturers of that instrument, including Mr. Ross, Messrs. Smith and Beck, Mr. Pillischer, etc. Among the coloured illustrations hanging on the walls, considerable interest was excited by the original sketches, made by the late Sir Charles Bell on the field of Waterloo, exhibiting various forms of gunshot and sabre wounds. Mr. Quekett's diagrams, illustrative of vegetable structures, and those of Dr. Lionel Beale, showing the minute structure of the liver, and his representations of urinary crystals and calculi, were also much admired. A specimen of bronzed skin attracted much attention. It showed very beautifully the deposit of pigment over the ridges of the papillæ. Among the philosophical apparatus displayed was a beautiful instrument, constructed by Mr. George Knight, in which the continuous current of electricity produced by the galvanic battery is converted, by passing through three miles of copper wire coiled round a bundle of iron wires, into a spark of such intensity as to give a vivid aurora light through a vacuum forty inches in length. The rooms were crowded during the evening, and among the visitors we noticed many gentlemen distinguished in the Medical Profession or in the pursuit of natural science. The arrangements reflected great credit on the stewards.

A very interesting discussion took place at the Medical Society of London on Saturday last, on the subject of the modern treatment of cancer by caustic applications. The paper of the evening was written by Mr. Moullin, who described the mode of treatment adopted by himself with success in some recent cases. His method, which is already known to the Profession, consists in first applying nitric acid so as to cauterize the skin over the carcinomatous breast, then applying a paste of chloride of zinc, making incisions into the slough thus produced, and reapplying the paste. After some days the cancer is enucleated, and in all the cases recorded by Mr. Moullin, except one, the patients have recovered; but as only a short time has yet elapsed since the cicatrization of the wounds, no opinion can be formed as to the return of the disease. In the course of the discussion which followed the reading of the paper, an unfavourable opinion was generally expressed of the treatment of cancer by enucleation by means of caustics, and it was argued by some that Mr. Moullin had

not proved his cases to be really cancerous, as no microscopic examination of the tumours had been instituted; while others, admitting the existence of cancerous disease, considered that extirpation by the knife offered at least quite as great a chance of cure as the treatment by caustics. In comparing amputation with enucleation, it was urged by most of the speakers that, without entering upon the question whether any surgical means were advisable or otherwise, the removal by the knife was, by the aid of chloroform, far more expeditious and less painful than the plan adopted by Mr. Moullin; and Dr. Rogers adverted to a fatal case which had fallen under his notice, in which Dr. Fell's treatment had been adopted at the Middlesex Hospital. In this instance the patient was said to have suffered great agony during the application of caustics, and her death occurred without any assignable cause, while she was under Dr. Fell's hands. It should be observed that her death was not in any way attributed to the treatment, but occurred somewhat suddenly and unexpectedly. Mr. Birkett, of Guy's Hospital, declared the result of his observation to have been that, without reference to Dr. Fell's or Mr. Moullin's cases, all the supposed instances of cancer cure were fallacies, for either the tumours removed were not really cancerous, or the disease had returned after the enucleation. In justice to Mr. Moullin it must be stated that the general impression entertained by the meeting was that his cases were really instances of cancer, although microscopical evidence was wanting to prove their nature with absolute certainty; but that as a very short period had passed since his operations, he would confer an obligation upon the Society and upon the Profession if he would watch the future progress of the patients and report the results. Under present circumstances, such cases, honestly recorded and traced to their termination, must possess a very high degree of interest.

REPORTS

ON

THE RELATIONS OF FOOD AND DISEASE.

No. III.

ON THE RELATIONSHIP BETWEEN THE HEALTH OF MAN AND THE CONDITION OF HIS FOOD.

THE investigation of such a relationship as we have here indicated involves a most extensive and wide field of inquiry; and one which, in a great measure, is still unexplored. The nature of the food of man is so varied, that he is exposed to the injurious effects which may result, not only from the flesh of animals which may be diseased, but also from unwholesome vegetables, or from both. In feeding on the higher animals, it is also to be observed, that man is doubly exposed to unwholesome influences. Their flesh may not only be unwholesome from diseases in the animals themselves; but it may be also unwholesome, by being the medium of transmitting poisonous principles from the vegetable world, on which such animals feed with impunity.

It is to the conditions of flesh unwholesome from disease, that we wish to direct attention; secondly as being the medium of transmitting unwholesome, or even actively poisonous principles to the human body receiving such parts as sustenance; and lastly, to the circumstances under which the secretions of animals, such as milk, become similarly injurious to health.

The nature of the evidence at present existing regarding the effects of the ingestion of the flesh of diseased animals, is of a somewhat conflicting kind, if accepted without analysis.

On the one hand, it is inferred that because *virulent* animal poisons may be digested with impunity, by some animals, and even by man, that therefore the flesh of animals dying of the diseases produced by these poisons may be used as food for

beasts, such as pigs, dogs, and carnivora generally, and also for man if properly cooked.

Experimental investigations bearing upon this topic have been instituted in France by M. Renault, who is Director of the Imperial Veterinary School at Alfort. In 1851, he communicated a paper to the *Académie des Sciences*, "On the effects of the ingestion of *virulent* matters by man and animals." This paper was referred to a committee having M. Rayer for reporter. No report upon the paper has, as far as we can learn, ever been delivered, but the following is the extract, containing, we presume, its salient features, published by the author in the *Comptes Rendus*.

"At the present time doubts prevail upon the question whether the health of pigs or fowls becomes injured by the accidental or prolonged feeding upon the remains of animals, (even when these are cooked), which have died from contagious diseases. Doubts also prevail, whether the health of man may not suffer from the consumption of the flesh of pigs or fowls that have been fed with that of animals suffering from contagious diseases.

"Finally, there is still greater doubt whether man does not expose himself to serious dangers by eating of the flesh the produce of animals which have died or been killed in consequence of some one of these diseases. In the face of these doubts, it may readily be supposed that the authorities take time to reflect before abandoning the only efficacious means of *surveillance* they have in their power, viz. the examination of the living animals, and determining the quality of the meat by its origin.

"It would be readily agreed, that if the consumption of the flesh or milk of animals suffering from rabies, *charbon*, glanders, etc., would expose those feeding upon it to contract these frightful diseases, or at least suffer seriously in consequence, the liberty to sell such meat, without a preliminary examination made during the life of the animal that has furnished it, would expose the public health to a permanent danger. For it may be stated in the most positive manner, whatever may have been written upon the subject, that there is no appreciable physical character which allows of our determining, by the mere inspection of meat prepared for sale, whether it is the product of animals that have been killed when known to be attacked by one of these terrible diseases.

"Experimental investigations, undertaken with the view of clearing up these doubts, and presenting a solution of these practical questions, should enable us to prove and to measure the extent to which the digestive organs may change, modify, or extinguish the virulent properties of contagious matters. In 1828 I had the honour of presenting to the Academy a memoir upon this subject; and since that period I have been engaged in an experimental study of contagious diseases, viewed in relation to agriculture, to which they do so much damage; in relation to public hygiene, with which they have such close connexion; and to the administration, upon which they impose duties which are sometimes very rigorous and always are very difficult. The memoir which I present to-day is the fruit of numerous and varied experiments commenced in 1828, and repeated at different periods, according as opportunity offered itself, down to the present time. From a general view of the experiments and observations contained in it, I believe the following propositions may be deduced.

"1. That the dog and pig may eat, without any ill effect upon their health, all the products of secretion, of whatever kind these may be, the blood, flesh, etc. (whether cooked or not) of animals suffering from any of the contagious diseases treated of in this memoir, viz., acute glanders and farcy, carbuncular disease, (at least when it affects sheep,) rabies, contagious typhus, epizootic peripneumonia of horned cattle, and the contagious epizootic of the gallinacea.

"2. That the same may be stated with respect to fowls, except perhaps in the case of the last-named disease. Before pronouncing upon this, it would be necessary to pursue inquiries beyond the limits of the epizootic influence.

"3. That the virulent matters of acute glanders and farcy, which entirely lose their contagious properties during the digestive processes of carnivora and omnivora, retain them, though less energetically, in the digestive canal of the horse.

"4. That the virulent matters of the blood of the spleen, which the dog, pig, and fowl eat without inconvenience and digest readily, frequently gives rise to carbuncular symptoms when swallowed by herbivora, such as the sheep, goat, and horse.

"5. That this immunity which carnivora and omnivora, fed with virulent matters, enjoy with respect to a contagion that produces all its effects upon the herbivora, appears to arise from the virus, which is effectually animal in its origin, undergoing, in organs destined to digest animal aliments, thorough modifications, in consequence of which it loses its injurious properties. This was not to be expected in the herbivora, which by their organisation are only adapted to digest vegetable matters.

"6. Whether this be the correct explanation or not, it is positive that there is no danger in man feeding upon the flesh or other products of animals (pigs or fowls) which have been fed, during a longer or shorter period of time, with more or less considerable quantities of the remains of animals that have died of contagious diseases.

"7. Since it is proved that pigs and fowls undergo no change in their health, or in the quality of the products which they furnish for the food of man, in consequence of their feeding upon matters proceeding from animals dead of glanders, farcy, *charbon*, or rabies, there is no sanitary reason for forbidding the feeding of fowls and pigs with the products of the knackers' yard.

"8. Cookery of the flesh and boiling of the liquids of animals that have suffered from contagious diseases, completely destroy all virulent properties of such flesh and liquids, so that the matter of glanders and farcy can now be swallowed by the horse with impunity; the carbuncular matter by the horse, sheep, and goat; and the remains of gallinacea, dead during the epizootic, by poultry. Moreover, all these matters, which are so active, and are possessed of so energetic and so certain a contagious power, when inoculated in the fresh state, become completely inert, whatever may be the animal inoculated, when they have undergone the process of a rather long cooking or boiling.

"9. Hence it results that, conceivable as is the repugnance felt by man at feeding upon flesh, milk, etc., which are the products of animals affected with contagious diseases, there really is no danger incurred by his eating the flesh when cooked, or the milk when boiled."

Now, although M. Renault seems to think that there may be no immediate danger from eating the flesh of animals which have been the subject of contagious diseases, when that flesh is cooked; yet we believe that experiments of this kind entirely fail to illustrate that part of the investigation which it is most desirable for us to obtain exact and extended information upon.

It is to be observed, in the first instance, that the flesh experimented on by M. Renault belonged to animals labouring under that class of zymotic diseases which are termed "*enthetic*," and which are implanted in men and animals chiefly by inoculation; and it has been long an established fact in science, that some of these animal poisons may be digested with impunity.

It is, therefore, unfair to push the legitimate conclusions derived from such experiments, and make them apply to the effects of the flesh obtained from animals that have suffered from the other classes of the zymotic diseases. Experimental investigations on the influence of the flesh of animals which have suffered from the *Miasmatic* and *Parasitic* classes of *Zymotic* diseases, when used as food for man, are most desirable. Extended, judiciously devised, and well-directed experiments, prosecuted in this direction upon animals, will alone establish the wholesomeness or unwholesomeness of flesh derived from such sources. As yet the circumstantial and direct evidence of science is *against* the belief that flesh from such sources is *not pernicious* as food; and although a man may make a repast on a "saddle" of mutton from a variolous sheep with impunity, or may even enjoy the "under-cut" from the "sirloin" of a typhous bullock, yet it does not follow, because he eats such food (when well cooked) even with a relish, (being ignorant for the nonce as to its condition,) that he will continue to do so for any length of time with impunity, and so maintain his health. If nature abhors a vacuum, she has a much more salutary abhorrence of man being at any time compelled to fill his stomach with food from such sources; and if he has any means of knowing the nature and qualities of his food, natural repugnance would prevent him using it in this condition.

There is abundant evidence to show that *parasitic* diseases of animals bring about *parasitic* diseases in man, when he feeds upon the parts of such animals which contain parasites

in some of their more early stages of development, and which subsequently attain the state of mature entozoa in some part of the human subject. Dr. Gordon's Army Report, in another page of this number, contains some interesting facts bearing on this subject. *Measly pork* is now a well-established unwholesome article of diet. The condition, however, of some of the *visceral* parts of animals is not so well known as being the favourite habitats of animal parasites. What is sold in the shops, especially in the pork shops, under the popular name of "liver and crow," (a) we have often found to contain abundance of hydatids in the liver otherwise healthy looking. Some of these hydatids are only obvious to the initiated eye, and they vary from a microscopic cyst to a cyst large and obvious to the unaided sense of sight. But the hydatid entozoon may also be large enough, and yet not visible to the eye; for, being imbedded in the hepatic substance, its presence there is only indicated by a clear white speck on the surface. Such livers are used as food, and relished much when cooked in various ways; and there are some good grounds for believing that even the most severe processes of cooking fail to destroy the vitality of such parasites. The livers of the herbivora are the favourite haunts of parasites, which vary in size from what the microscope only can detect to a size that is obvious to the unaided eye. These parasites are to be met with in the livers of game, such as rabbits, hares, and perhaps, also, of the deer tribe generally, from an oval microscopic ovum up to the size of the liver fluke, too obvious to be used unknown as food, which infests the liver of the sheep.

The illustration of this part of the subject we may, perhaps, give more in detail in a future report, and in the mean time let us state and examine the evidence of a direct kind, which shows the pernicious influence of the flesh of animals which have been diseased when used for human food.

Students of medicine are taught to believe that the flesh of animals is pernicious as food for man which has been obtained from animals diseased at the time of death; and we also believe that the flesh of animals which are suffered to die is of itself unwholesome; and that the Mosaic law rightly forbids the use of any creature as food which "dies of itself."

There are cases on record which prove that the flesh or viscera of diseased animals, and especially of those which have died of endemic or epidemic distempers, are undoubtedly injurious, and even in some instances rapidly fatal.

Dr. Taylor writes, that four members of a family residing in Oxfordshire, during the spring of 1841, dined when in good health upon part of a sheep which had died of a disease then prevalent among cattle. The symptoms which followed this meal resembled those of irritant poisoning, accompanied by others indicating an affection of the nervous system. A child who partook of the food died in three hours, but the others in time recovered from the symptoms. (Guy's Hospital Reports, 1844.)

The same author records that a shepherd, with his wife, a son and a daughter, dined on the mutton of a sheep which had been affected with "*the staggers*," and which had in consequence been killed.

The son and daughter suffered from vomiting and purging, and the boy died in a few hours. The father, mother and daughter recovered. "There is no doubt," says Dr. Taylor, "that epizootic diseases may be a frequent cause of rendering animal food poisonous."

A letter published in last week's number of this Journal from Dr. Minturn, in Paris, confirms, from his own personal knowledge, the facts recorded by Dr. Taylor and others, that there are certain districts in North America in which the *milk and the flesh of animals*, especially of cattle, acquire poisonous properties from the grass on which they feed, or from *something* in their food, the nature of which is unknown. All that is known with certainty is, that cattle feeding in certain low, marshy localities are attacked with vomiting, purging, and extreme nervous agitation, which has received the name of the "trembles;" and that persons who partake of the poisonous food suffer also from what is called the "milk-sickness," "sick stomach," "swamp-sickness," "puke fever," or "trembles." Calves also contract the same disease through the milk, and its veal produces the same effects as the flesh of the mother-cow. The districts of this endemic malady lie to the west of the Alleghanies, in many parts of the United States, especially in Alabama, Kentucky, Indiana,

(a) The part called the "*crow*" consists of the mesentery and its glands (often morbidly large), also the spleen, and sometimes the pancreas.

and Ohio. The inhabitants only suffer when they eat the flesh of the cattle, or from the use of the milk and its products in the shape of butter or cheese. The symptoms of the unwholesome nature of the food are vomiting, purging, extreme nervous agitation, and prostration. And when the diseased animal products are eaten to any extent, collapse and death invariably follow.

"The animal," says Dr. Minturn, "may be so mildly attacked that his condition may be scarcely noticeable if not suspected, and may even recover without betraying the disease. At the same time the milk, the butter, and the cheese, spread far and wide by the avenues of trade, sicken all who are so unfortunate as to make use of them; and consumers in the vicinity of such well-known places are careful to inquire where such products came from, and by whom they were made." It appears, however, from the Report of Drs. Hosack, Post, and Chilton on this subject, that in some of these infected districts the inhabitants, with a recklessness of human life which seems incredible, carry the butter and the cheese, which they themselves dare not eat, to the markets of the towns west of the Alleghanies, and that thus there are frequently produced poisonous symptoms, and even death, for which the medical man cannot account, or is induced to consider as some new or anomalous form of disease. The same Report states that cattle from the infected districts are sent in great droves over the mountains; but to deceive the buyers as to the place whence they came, the cattle are brought to New York by a southern route, and are styled "southern cattle." The viscera of such animals are often found diseased, and the livers invariably so. Has the British Government any certainty that such beef, butter, and cheese, does not find its way into our country?

The recent observations of M. Soumille, of which we gave a resumé in the number of this Journal for the 18th of this month, do not seem to convey any new information; but they confirm the belief and observations of others that it is not possible to tell, by inspection merely, when the beef has been cut up for sale, whether it has been obtained from a diseased animal (except in the case of some general diseases, such as small-pox, phthisis, carbuncular disease), or from an animal that has died, or one that has been killed.

That the milk of diseased cattle is equally pernicious, we have abundant evidence to show. At not a very recent period the morbid changes produced in the quality of the milk by diseased conditions of the cow attracted considerable attention in Paris, owing to the prevalence of a malady called the "*eocote*" among the cows in that capital. It was found by Labillardière that the milk of cows affected with tubercular phthisis contained seven times more phosphate of lime than usual; Dupery confirmed the observation; and it is well known to every physician how much the condition of the milk may be influenced by drugs and morbid states of the body. There are abundant proofs to show that its qualities are altered by diseases in the cow as well as in the human subject.

From direct testimony, therefore, as well as from such circumstantial evidence as we noticed towards the conclusion of our last article, there can be no doubt that the flesh and viscera and milk of animals which die of *miasmatic* or *parasitic* diseases, or are killed during their progress, are unwholesome, and unfit for human food; and that when persisted in they tend to produce dysentery, diarrhoea, or scurvy amongst the people, or diseases which belong to the *dietic* class of zymotic diseases, and which require a persistent use of the pernicious food and some time for their development.

A SIMPLE BAROMETER.—The *Mobile Register* of March 1, says:—"On board the Mexican steamer is a barometer of the most simple construction, but the greatest accuracy. It consists only of a long strip of cedar, very thin, about two and a-half feet in length, about an inch wide, cut with the grain, and set in a block, or foot. This cedar strip is backed or lined with one of white pine, cut across the grain, and the two are tightly glued together. To bend these when dry is to snap them, but on the approach of bad weather the cedar curls over until the top at times touches the ground,

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.—The Corporation of London have voted the sum of one hundred guineas to this institution.

REVIEWS.

An Exposition of the Signs and Symptoms of Pregnancy: with some other Papers on subjects connected with Midwifery. By W. F. MONTGOMERY, A.M., M.D., M.R.I.A., Ex-Scholar of Trinity College, Dublin; Professor of Midwifery in the King and Queen's College of Physicians in Ireland, etc., etc. From the Second London Edition. Philadelphia: 1857. 8vo. Pp. 568.

Dr. Montgomery's classical volume has been reprinted in America in a manner which is at once worthy of the great merits of the work itself, and highly creditable to the Transatlantic publishers. The paper and typography are excellent, and the very beautiful plates of the corpus luteum are most admirably executed. Those representing the appearance of the mammary areola during pregnancy have been omitted, because, as the American Publishers state, "the extreme delicacy of finish and accuracy of colouring requisite to render them of any service as reliable guides, would have increased the cost of the work to an extent far beyond their direct utility as a means of diagnosis, and thus prevented its republication; while their omission was not found in any way to impair the completeness of the text." The publishers do not say too much when, in their announcement of the volume, they observe, at the close of a just tribute to the value of the original, that "in every point of mechanical execution the work will be found one of the handsomest yet issued from the American press;" and we congratulate the distinguished author on the evidence which this circumstance affords, that in the New World, as well as in the Old, his valuable contributions to obstetric science have met with the appreciation they deserve. It is high time, however, that an international copyright treaty should make American reprints profitable as well as honourable to European authors.

The Metaphysicians, being a Memoir of Franz Carvel, Brush-maker, written by himself; and of Harold Frandling, Esq. Written, and now republished by FRANCIS DRAKE, Esq., with Discussions and Revelations relating to Speculative Philosophy, Morals and Social Progress. 8vo. pp. 428. London: 1857.

Francis Carvel becomes early in life a devoted disciple of Kant, and there seems some odd connexion between his early studies, his Dutch descent, and a queer old Dutch Bible. He plunges into mysteries which to him seem to have some hidden meaning, but which can be grasped only by the initiated, seeming to the rest of the world mere stupid trifles. By pondering continually on the "twelve categories of the understanding," and realising the motto he has adopted—

"Nothing is there to come, and nothing past,
But an eternal Now doth ever last,"

he suddenly finds himself living in the "past, so called." There he meets advantages suitable to the 18th century, and has a narrow escape of one which would scarcely suit any era, namely, falling in love with his own grandmother.

Gliding on into the future we are favoured with a foretaste of the 20th century. He describes London free from fog, smoke, disorder or poverty. Men living happily in public halls; mechanics with sufficient work to keep them quiet, and sufficient rest to make their minds healthy; a state of society in which vice has no encouragement, and love gives parents and guardians no trouble. When we add to this that the tyranny of fashions is over, and the dress even of men is "easy and graceful," who will not wish to live in 1957?

We have kept to the last the most important sign of the times—the prophecy of a Medical millennium. Doctors in this Utopia are the supreme rulers of table life. Not even the most healthy eat stimulating food, or take strong drink except by order; and Medical men are the guardians of health rather than attendants on disease. No one need therefore be surprised that the term of life begins again to expand, and has already reached one hundred years.

Into the subject of the second memoir we do not enter. The metaphysics are more dark, and the story open to greater objections than the first.

To the true genius the plan of this work would have afforded a wide field for exercise. The theme, however, seems too large for the author. He reminds us of the old story of the seven-leagued-boots, with this material difference;—little Jack was able to use the boots as well as the giant.

A Personal Narrative of the Discovery of the North-West Passage. By ALEXANDER ARMSTRONG, M.D., R.N., late Surgeon and Naturalist of H.M.S. Investigator. Pp. 616. London. 1857.

ON the 20th of January, 1850, the ship Investigator set sail from Plymouth for the Arctic regions. The course taken was first towards the Antarctic Pole, then passing through the Straits of Magellan, the vessel was steered to the Sandwich Islands; thence direct to the north, passing through Behring's Straits, and to the icy regions around the North Pole. After encountering innumerable difficulties from the masses of ice which impeded their passage, from the prevalence of fogs, and from the want of charts, the intrepid voyagers pursued their track through frozen wastes of sea and land hitherto unexplored and consequently undescribed, until, having rounded Baring Island and sailing through Banks's Strait, the ill-fated vessel was finally lodged in a bay to the north of the island, where it probably still remains, unless the wintry storms or the partial summer thaws, or the influence of both combined, have shattered and dispersed the sturdy timbers which had previously braved the fury of the ocean, and which had escaped the no less dangerous shoals and sand-banks and masses of floating ice in the Polar Sea. When wedged in the ice in the bay, to which the name of Mercy Bay has been somewhat inappropriately given, the unfortunate crew, shut out from all human intercourse and unable to procure the scanty supplies of food which are occasionally to be found even in these high latitudes, began to suffer all the pangs of hunger, and the diseases which follow from the privation of food; the supply of provisions was daily becoming less and less, and the sick list was daily augmenting. As a last resource, some part of the half-famished crew were preparing to wander in a body, they knew not whither, in the hope of finding amid these barren solitudes some trace of human habitation or some food, however scanty; when, to the surprise and joy of all, a British officer made his appearance in Mercy Bay, and communicated the happy tidings that two of Her Majesty's ships, the Resolute and the Intrepid, were at no great distance, and amply provided with stores and comforts for the Arctic adventurers. Under the guidance of Lieutenant Pim, the officer alluded to, the crew of the Investigator left the vessel to its fate, and, after a journey of much difficulty across the ice, reached the other ships. The abandonment of the Resolute and Intrepid, and the self-release of the former from the ice, its capture by the American Government, and its subsequent graceful restoration to our gracious Queen, are matters of history. The officers and men of the Investigator were brought back in safety to this country, after an arduous and perilous service of nearly five years. The object of the Expedition was partially accomplished, for, although no traces of Sir John Franklin and his brave associates were discovered, the existence of a north-west passage was fully established.

The personal narrative of this most important expedition is given to the world by a member of our Profession. It will be read with interest by all who appreciate the brave and philanthropic endeavours of our Navy; and those who seek for scientific information upon the geology, the natural history, and the botany of the Arctic regions, will be amply gratified by Dr. Armstrong's graphic descriptions.

BOOK NEWS.

Dr. Churchill, of Dublin, has just published a fourth edition of his well-known Manual, *On the Diseases of Women, including those of Pregnancy and Childbirth*. The present edition contains more matter than the last, having been enlarged by the results of the author's experience. While the letter-press has been augmented, the illustrations have been reduced in number, but some new plates have been introduced, illustrative of certain diseases of women. These illustrations have been taken partly from original drawings, and partly from the published works of Huguier, Clarke, Boivin, and Dugès; but "none," the author informs us, "from Dr. Ramsbotham." On comparing Dr. Ramsbotham's work with Dr. Churchill's, we find that none of the plates contained in the former are now reproduced in the latter.—Mr. T. J. Ashton presents us with the second edition of his work, *On the Diseases, Injuries and Malformations of the Rectum and Anus*. It fully maintains the character of the author as a diligent observer and successful practitioner in this class of affections.—*Vocal Gymnastics, or a Guide for Stammerers*, is the title of a small book by Mr. G. F.

Urling, who states that he was first induced to study the cure of stammering by his acquaintance with Mr. Hunt, an empirical practitioner in that department. Mr. Urling very properly repudiates the practice of making a secret of the cure of stammering; and in a small compass, he gives some really valuable information as to the physiology of the vocal organs, and as to the best method of obviating impediments of speech. We have no doubt that his principles are correct, and we recommend his pages to the notice of all persons interested in the treatment of this defect. Mr. Urling rests his treatment upon the necessity which exists in all speakers to cultivate: 1. A proper management of the breath; 2. proper vocalization; and 3. proper articulation. He believes that the complaint is a nervous one, and that surgical means and even medical treatment are of little avail.—*Morgan on Syphilis* is a little book which does not suit our taste. It contains a popular and meagre account of syphilis, gonorrhœa, and impotence, and a due catalogue of the author's own cases. It contains nothing which is not already known to the profession; and as to the public, for whose use we suspect that it is principally designed, the less such books are read the better.—*The History, Diagnosis, and Treatment of the Fevers of the United States*, by Dr. Elisha Bartlett, is a work of standard reputation, which has now reached its fourth edition. The accomplished author having been cut off in the prime of life, the duty of preparing the present book for the press has devolved upon Dr. A. Clark, who has undertaken the task at the special request of Dr. Bartlett, expressed during his last illness. It is the best work on fevers which has emanated from the American press, and the present editor has carefully availed himself of all information existing upon the subject in the Old and New Worlds, so that the doctrines advanced are brought down to the latest date in the progress of this department of Medical science.—*Practical Hints on the Management of the Sick Room*, is the name of a small tract, written by Dr. R. H. Bakewell. It may be consulted with advantage by persons who are called upon to perform the minor duties of the sick chamber.—*The Anatomical Remembrancer, or Complete Pocket Anatomist*, is a little manual, in its fifth edition, containing a short account of the special anatomy of the human body, and will be found useful in helping the labours of the student, and in refreshing the knowledge of the practitioner.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON THE METHODICAL EMPLOYMENT OF MERCURIAL OINTMENT IN SYPHILIS.

By Professor SIGMUND.

Professor Sigmund, of Vienna, having been frequently requested to publish his mode of employing mercurial ointment in the treatment of syphilis, describes it in the present paper.

1. *The preparation of the patient.*—The diet is diminished and simplified, this being done with care in anæmic and scrofulous persons. Highly-seasoned foods and alcoholic drinks are gradually replaced by light vegetable diet and water. The patient must gradually accustom himself to confinement to his room, spending great part of the day in bed or in warm clothing, sleeping eight or nine hours, and encouraging morning sweating. By baths the skin is to be rendered clean and soft, favouring transpiration and the absorption of the ointment. If the treatment is urgent, preparatory measures must be abridged or omitted, baths being employed only between the applications of the ointment.

2. *The rubbing-in of the mercury.*—As a general rule, the ung. merc. comm. (1 part of mercury to 4 of fat) is used, the frictions being performed just before bedtime, and continued at least for ten minutes at each spot, the softer portions of the extremities being the preferable places. If the patient is strong enough he may rub in the ointment himself; and if the hand is hard and rough, it may be covered with a soft glove, previously soaked in grease, so as to prevent the absorption of the ointment. The parts rubbed are then wrapped in linen or woollen cloths, which are to be retained until morning, when the body is to be washed in tepid soap-and-water, well dried, and warmly covered. Never less than 20 grains is rubbed into

the two places at a time, and rarely more than 40 (*i. e.* 20 to each place). The number of frictions rarely exceed 40, and in general vary from 20 to 30. In some old and obstinate forms of the disease, occurring in enfeebled subjects, it is found advantageous to rub in for seven or fourteen days, then rest for the same period, and so on. During treatment, the patient's sitting-room should be light, dry, warm (70° to 72°), and well-ventilated—neglect of ventilation often inducing ill consequences that are attributed to the treatment itself. In this room he should spend only five or six hours, the rest of the time being passed either in bed, or, warmly covered, in the bedroom. Early in the morning he should endeavour to excite sweating, but short of excess, for two or three hours, by wrapping himself closely in blankets, afterwards gradually resuming lighter bed-clothing. The bed and body linen are to be changed often enough to secure cleanliness. The diet should be light, and as spare as is consistent with support. Alcoholic drinks are forbidden, except in small quantities for persons who have become accustomed to their abuse. Anæmic, scorbutic, and enfeebled persons require a better diet, and even a little good wine or beer. Tobacco is forbidden. From the commencement gargles are to be used at least every hour—these, when there are ulcers of the mouth or throat, consisting in a solution of corrosive sublimate (gr. ii. ad ℥j. aquæ), or the liquor Labarracqui (ʒij. vel ʒiv. ad ℥j.) When there are no sores, alum, tannin (ʒ½ vel ʒj. ad ℥j.), borax, or tr. of iodine, may be employed. When the gums are quite healthy, it suffices to wash the mouth with diluted eau de Cologne, brandy, or port wine, the teeth being carefully cleaned thrice daily. Spring, or the beginning of summer, is the best period for instituting this treatment, as access to genial external air favours convalescence. Whenever possible it should be delayed till then; and sensitive, feeble persons, disposed to tuberculosis or rheumatism, treated in autumn or winter, often require to be kept in rooms of moderate temperature until the approach of a warmer season.

3. *After-treatment.*—When the inunctions have finished, the patient should take several soap and water baths at 90° or 92°, and gradually diminish the number of hours passed in bed, so that within a week he resumes his usual habit, still, however, encouraging transpiration by warm clothing, and taking a tepid bath every forenoon. The amount of food must only be gradually increased. Exposure to cold and damp should be avoided; and the body should be hardened by vapour baths and cold sponging, and in the case of the rheumatic or gouty by sulphureous baths.

4. *Accidental ill-effects.*—These rarely present themselves during the treatment, but require notice. They are:—(1.) *Inflammation of the skin*, in the shape of erythema or eczema. Although there are some very rare cases in which these arise, whatever care be taken, and in which the treatment has to be given up; yet if the ointment be properly prepared, not too roughly applied, and well washed off next morning, irritation is seldom met with. (2.) *Salivation.*—This is never intentionally excited, Dr. Sigmund attaching no importance to its production. When moderate, it need not interrupt the treatment; and even when it is considerable, it is only requisite to pay still more attention to hygienic rules, and to suspend the frictions for awhile. If treatment is urgent they may even be continued, giving at the same time the iodide of sodium or potassium, which always moderates, and sometimes arrests the salivation. However, salivation is of very rare occurrence. (3.) *Excessive sweating.*—Moderate morning sweating is favourable, but when it becomes excessive and continuous, notwithstanding due regulation of the temperature and clothing, and especially in the consumptive and scrofulous, this treatment must be given up. (4.) *Diarrhœa.*—When this is only moderate, the treatment may be continued, prescribing at the same time Zittmann's decoction, or other astringents; but when it is excessive, at all events a temporary suspension of treatment is called for. (5.) *Severe pains.*—The typical, nocturnal, venereal pains gradually yield to the inunctions; but there are others of a more fixed character, which sometimes have their seat in particular nerves, as the facial, sciatic, etc. Anodynes should be first tried, and then iodide of potassium; and if both are unavailing the frictions must be temporarily or wholly left off. (6.) *Great debility* is sometimes observed in cachectic and oldish patients, and may be accompanied by excessive sweating or diarrhœa. A mild, nutritious diet and some quinine should be given; and when the treatment is not

pressing, a preliminary residence in the country, with milk diet or mineral waters, is of great service. (7.) *Increase of the symptoms*, in spite of the treatment, shows its uselessness; for, when beneficial, a few days, or at all events two or three weeks, suffice to show its good effects. The frictions should be used with long pauses. It is in scrofulous, tuberculous, or scorbutic subjects that this deterioration is chiefly observed; and it not unfrequently happens that after these conditions have been appropriately treated, the frictions succeed. In other cases they only aggravate the symptoms, while other forms of mercury may prove useful.

In conclusion, Professor Sigmund observes, this treatment is suitable to children, women, and persons who have undergone operations; while it leaves the stomach free for the reception of medicinal agents that may co-operate in the cure or relieve complications. The success he has met with in its employment in 9379 cases, occurring between 1842 and 1855, enables him to declare that it is the simplest and most efficacious mode of treating the various forms of the disease.—*Wien Wochenschrift*, 1856, No. 36.

EXCERPTA MINORA.

Starch Bandage in Chronic Inflammation of the Joints.—Dr. Balassa has published several additional cases, showing the very great utility derivable from the starch bandage in cases of chronic inflammation of the joints, it proving powerfully adjuvatory even in scrofulous disease.—*Wien Wochenschrift*, 1856, Nos. 40 and 41.

Borax Enemata in Diarrhœa of Children.—The great utility derived from the employment of borax in aphthæ of the buccal mucous membrane should lead to its more frequent use. Thus in intestinal catarrh of children there is often ulceration around the margin of the anus. In such cases M. Bouehut employs the following enema with advantage:—Borax ʒj. ad ʒij., weak barley-water ʒxxxvi.—*Bull. de Thérap.* tome lii. p. 217.

Sulphate of Zinc and Nitrate of Silver in Chronic Ophthalmia.—Dr. Posta endeavours to lay down some rules, based on practical experience, respecting the employment of these substances. In all ophthalmias the zinc should be employed as soon as the chronic stage commences, the proportion being at first 1 part to 75 of the vehicle, going on in case of resistance of the disease to 2 to 100. When there is a slight degree of chronic keratitis present, with cloudiness of the cornea, the nitrate ($\frac{1}{2}$ part to 30 parts) is the preferable means. He considers that all greater strength than this is unjustifiable and mischievous.—*Bull. de Thérap.* tome lii. p. 235.

Purulent Otitis.—M. Trousseau has long been in the habit of treating the purulent otitis which follows scarlatina or measles in the following manner:—For some days he throws in an injection of tar-water, and then applies, by means of a pencil, some of the following liniment night and morning:—White precipitate, binoxide of mercury, aa $\frac{1}{2}$ part, olive oil 4 parts, lard 2 parts. If this does not succeed, he substitutes a solution of sulphate of copper or nitrate of silver, and prescribes besides sulphureous baths, and the extract of bark.—*Revue Méd.* 1857, p. 311.

Lilac Leaves as a Febrifuge.—M. Macario having been induced to try these in intermittent fever, owing to a popular reputation they had acquired in Flanders, found that of 20 cases, 13 were entirely successful, and 7 failed. In some of the former quinine or arsenic had failed. A decoction of the leaves was administered fasting, during five or six days in succession.—*Revue Méd.* 1857, p. 313.

GENERAL CORRESPONDENCE.

THE PRETUBERCULAR STAGE OF PHTHISIS.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you permit me to be with your readers the dragoman of my own ideas on the subject of pretubercular stages of phthisis? Infelicitous, indeed, is the man who has Dr. E. Smith for his expositor, or who joins issue with him in opinion! I cannot make myself understood by that gentleman; nor can I bring him to, or keep him within, the proper sphere of the argument, so eccentric and tangential is he in his movements. The discussion would be vain, indeed,

if it were limited, as Dr. E. Smith asserts, to that small point, viz. the value of the case, as bearing against the theory of pretubercular stages, which I brought before the Pathological Society.

The matter is of wider signification. Let me, therefore—leaving Dr. E. Smith—explain the question to your readers. Dr. E. Smith makes an assertion,—viz. that there is a pretubercular stage of phthisis. I defy him to prove his position. I state reasons which, to my view, demonstrate the fallacy of what he maintains; and I incidentally say, Here is a case which seems to me to corroborate my statement. Dr. E. Smith hereon having, I must suppose, a bad opinion of his own position, instead of maintaining it on its merits, and giving the world some show of reasonable argument in favour of the correctness of his views, concentrates his energies upon this accidental case and the author of it; and proves, at least to his own satisfaction, that things could not have happened in the history of that case as I stated them, because they don't square with his, Dr. E. Smith's, experience.

Now, I will for the moment, in order to draw the matter out of the slough of individuality, bend to this experience. I will admit that Dr. E. Smith, who did not see the case, understood it better than I who did. I will admit, also, the correctness of various inaccuracies with which he has unwittingly extinguished it; and I will turn to your readers, state the subject clearly and shortly to them, and so leave it in the hands of the proper judges.

By the quinquesyllabic *pretubercular*, as applied to phthisis, writers (not merely Dr. E. Smith) mean, that there exists an abnormal condition of the lungs and of the body preceding the deposition of tubercular matter in the lungs, which condition is capable of demonstration by certain given signs or symptoms. But it appears that opinions differ as to the modes in which pretuberculosis shows itself; some Physicians find no local physical signs of disease as indicative of the existence of "Phthisis before the deposition of tubercle;" and they draw their conclusion of the fact from the presence of a series of cachectic symptoms, which they frequently find, from experience, terminates in tubercular disease of the lungs. Dr. E. Smith's pretubercular stage is illustrated not only by the presence of certain symptoms, but also by the existence of physical signs; whenever he meets "with the slightest dull (subclavicular) percussion sound, with lessened vesicular murmur, less forcible and deep inspiration, and flattening of the apex of the lungs," he considers that he has met with the first condition of phthisis, the stage anterior to the deposit of tubercle.

Now, in the present condition of our medical knowledge, I really do not think I need stop to discuss the pretubercular stage of phthisis of Dr. E. Smith, for I feel convinced that there is not another auscultator besides himself in this country, who, meeting with the physical signs here above-mentioned, would rest satisfied that they indicated an absence of tubercle in the lungs; rather would he believe that they pretty certainly indicated its presence there.

It is to the former theorists, therefore, that I especially address myself when I ask, how, in the cachectic conditions of the body they tell of, they prove their assumption, viz., that no tubercle exists in the lungs? They can do so evidently only from there being an absence in such case of those particular physical signs, which indicate the existence of foreign matters in the lungs; but the absence of physical signs is no proof positive of the absence of tubercular matter in the lungs. What, then, is the value of their theory? The best of auscultators—Skoda and Louis, for example—have admitted that "there are no distinct signs by which we can with certainty diagnose the existence of tubercle;" and that "solitary tubercles do not of themselves produce the slightest change in the percussion-sound of the lungs." I should think that most observers, also, have had such facts as these forced upon their attention. A case which I exhibited at the Pathological Society, in my opinion, demonstrated this fact. Both lungs were studded with miliary tubercles, and yet when I examined, and very carefully, the child from whom they were removed, sixteen hours before death, I found no auscultatory or percussion signs whatever, appreciable to my ear, which indicated any deviation of these organs from their healthy state. I asserted, and re-assert the fact with confidence, notwithstanding that Dr. E. Smith assures me I am mistaken, and notwithstanding what he calls the consternation of Drs. Quain and Theophilus Thompson—a consterna-

tion, by the way, which was never expressed either in the looks or language of those gentlemen.

But what is there hard to understand in the fact of signs being absent in certain cases where tubercle is present in the lungs? No alteration occurs in the percussion sound, because healthy, air-containing tissue intervenes between the tubercles. The air enters freely into the lungs, and therefore the respiratory murmur is clear. The tubercles have not yet either softened or excited local inflammations; there is, consequently, no exudation, and therefore no râles. And here let me ask Dr. E. Smith whether he dare venture to assert, that he can always detect the presence of tubercle in the lungs? I am sure he has not the courage to answer, Yes; and if not, then it seems to me, that down at once goes the theory of pretubercular phthisis; for how can he, then, with any show of reason, from the absence of physical signs, predicate with certainty the absence of tubercle?

As the matter now stands, I think I am fully justified in saying, that to talk of that series of symptoms called phthisis, apart from the idea of tubercle in the lungs, is like supposing the tragedy of Hamlet enacted without a Prince of Denmark? Would any admirer of pretubercular stages venture to bring to the Pathological Society a pair of lungs, in the so-called pretubercular condition, and say: Here is phthisis, in its first stage, without tubercle? Of course, we all know well enough, that there is a morbid condition of the body existing anterior to the deposit of tubercle in the lungs; that tubercle is not the disease, but merely the external and tangible manifestation of that anterior condition,—perhaps the last of a long series of antecedent changes which have been working in the system; that the disease may be there, in the body, from the moment of the first evolution of the ovarian vesicle; and we know, also, that treatment is not directed to the tubercle, but to the arresting, if it may be, of that morbid condition which presides over the deposition. This is all clear enough. But we cannot seize upon that anterior morbid condition; and what I object to is the assumption of conditions, which are not warranted by direct proof and experiment; and the consequent founding of practice upon vague hypothesis. This I venture to think Dr. E. Smith has done. He tells us, that the condition representing the pretubercular stages of phthisis, and discoverable by the signs above referred to, is, “a lessened action of the vesicles of the lungs, originating in themselves, or conjoined with an atonic condition of the general nervous system;” and boldly running his theory to its legitimate conclusion, he advises that, among other remedies, one of the most important in this state is, to instruct the patient, while sitting at rest, to inspire deeply. Such a conclusion would have startled many a theorist out of his dream; but the *reductio ad absurdum* argument seems not to avail with Dr. E. Smith. Most of your readers will, however, I fancy, agree with me, that there must be “*something wrong here*,” (as Dr. E. Smith would say,) in the premises which lead to such conclusions.

To define with certitude the condition which precedes the deposit of tubercle in the lungs, would be to enunciate a greater discovery in Medical science than has been imparted to the present generation. Such a discovery would give us a clue to the nature of that mysterious force, which presides over nutrition in its healthy and its morbid states; it would unfold a corner of the veil, which conceals the workings of the vital agencies. But until such a discovery is made, the rational observer will be contented to follow on in the old track; he will abstain from weaving ideas of methods of treatment out of merely hypothetical considerations; he will not trouble his brethren with pretubercular stages of phthisis, and apply remedies to them, until he has *proved*, that the series of signs and symptoms, which he calls pretubercular, are really such; he will not affirm that this cachectic condition and these physical signs represent a state of the lungs and of the system antecedent to the deposit of tubercle, so long as it is possible, and indeed very probable, that such condition and signs co-exist with, or are actually consequential to, the deposition of the tubercle.

Such are my views on the subject of (so-called) pretubercular stages of phthisis. My apology for troubling your readers with them is, that I have had Dr. E. Smith for an interpreter of them in your Journal. But “*Eheu! jam satis*,” you will say of the subject; and I promise you no more to ask your indulgence upon it.

I am, &c.

Clarges-street, April 28, 1857.

W. O. MARKHAM.

PERINEAL SUTURE.

(To the Editor of the “Medical Times and Gazette.”)

SIR,—May I beg the favour of your inserting a few lines in reply to the last letter of Mr. Baker Brown, wherein he re-asserts his claims to the perineal operation, without any additional evidence to support his pretensions?

That he is unwilling to enter into a controversy on the subject I can well understand, but I leave it to the profession to decide the cause.

As the matter at present stands, Mr. Brown asserts his claim to be “the first who publicly operated and publicly advocated the operation.” In opposition to this claim I referred to certain cases inserted in the public journals long before Mr. Brown performed his first operation. I moreover proved, as far as proof was possible, that Mr. Brown must have been aware of the existence of these cases, and in my letter also mentioned the exact places where they might be referred to.

Until, therefore, Mr. Brown can disprove these statements, and show that my assertions are incorrect, I must continue to doubt his claims, and leave it to the judgment of the profession to decide how far he is justified in his pretensions.

I am, &c. HENRY SAVAGE, M.D., Lond.

7, Gloucester-place, Portman-square, April 29, 1857.

LACTIC ACID VERSUS PEPSINE.

(To the Editor of the “Medical Times and Gazette.”)

SIR,—Under the head of “Hospital Notes,” in your number for last week, I observe that Dr. O’Conner has recommended lactic acid as a substitute for pepsine in digestion. That lactic acid should, *per se*, possess the property of digesting the protein bodies and allied substances is at least a novel chemical fact; and I was induced, therefore, to make some experiments with a view to testing its accuracy.

I employed for this purpose the pure hydrated lactic acid $H_1C_6H_5O_6$, and the substance known as Boudault’s pepsine, which consists of pepsine properly so called, mixed with a definite proportion of starch, with a view to keeping it in a convenient form. The comparative digestive fluids which I employed were prepared in the following manner:

1. Twenty grains of hydrated lactic acid were dissolved in one fluid ounce of distilled water; and this liquid I will call for brevity, lactic acid.

2. Fifteen grains of Boudault’s pepsine were treated with one fluid ounce of distilled water, to which two grains of hydrated lactic acid had been previously added; after standing half an hour the whole was filtered. The filtered liquid, then, I will call pepsine.

To each of these digestive fluids I added one drachm of powdered dried fibrine, obtained from the blood of the calf. In each case the mixture formed a stiff, gelatinous paste; they were then exposed together in a water-bath, to a temperature of 100 deg. Fah. At the end of one hour the fibrine in the pepsine had given way and softened, and at the end of two hours and a half was completely digested, presenting the appearance of a viscous, somewhat milky fluid. In the lactic acid specimen, however, no such phenomenon appeared; it remained hard and continued so, though exposed for nine hours to the same temperature. In a similar experiment with small pieces of roast beef, that in the pepsine was almost all gone at the end of nine hours, while that in the lactic acid had simply swelled up and become bigger.

These experiments sufficiently demonstrate the inefficiency of lactic acid, *per se*, as a digestive agent, when compared with acidified pepsine. But in order to obtain an accurate result, I placed an oblong piece of coagulated white of egg, weighing exactly sixty grains, in an ounce of each of the digestive fluids described above. These two specimens were exposed, as in the other cases, to the heat of a water-bath at 100° for nine hours. At the end of this time the piece of albumen in the pepsine had considerably diminished in size, and when taken out of the liquid, and allowed to drain on blotting paper, weighed forty-seven grains, showing a loss of thirteen grains. The piece of albumen, however, in the lactic acid had merely swelled up, and absorbed water, and when drained and weighed, was found to have increased twenty grains in weight, owing to the absorption of water.

That dilute acids can play the part of the gastric juice has long ago been denied by Lehmann, and it would have been

unnecessary to refute it now, had it not been put forward by a medical man. There can be no doubt that lactic acid plays a very important part in acidifying the gastric juice, and on this account I used it to acidify my pepsine, but it is not less certain that it has no digestive power by itself.

I am, &c. W. STEVENS SQUIRE, Ph. D.

277, Oxford-street, April 30, 1857.

[It will be observed that we alluded in our note to the comparative powers of *pepsine* and lactic acid. Dr. Squire's experiments with *acidified pepsine* open another question.—Ed.]

PUBLIC MEDICAL APPOINTMENTS.

[To the Editor of the Medical Times and Gazette.]

SIR,—Permit me to direct general attention through your columns to the dawn of a new era in the system of public medical appointments, as signalized by three advertisements which have recently been going the rounds of the medical and daily papers. The first makes known the decision of the Minister of War, "that assistant-surgeons for service in the army shall henceforth be selected after a competent examination;" the second is a call for a physician to the Queen's Hospital, Birmingham, accompanied with an announcement from Professor Sands Cox, Dean of Faculty, that it is intended to analyze closely the claims of candidates, and to appoint the best one. At the same time it is intimated that "canvassing the Council, either personally or through their friends, is strictly prohibited, and will be held an entire disqualification." In precisely the same admirable spirit is conceived the third advertisement to which I have alluded, for a resident medical officer to the Birmingham Workhouse. These facts are indeed cheering, but until the reform extends to London, the great focus of the abuse will spread its baneful influence through the profession. On a comparatively recent occasion you powerfully exposed the corrupt practices resorted to in filling vacancies on the staffs of metropolitan hospitals. By insisting until the gigantic abuse is conquered, you will be conferring incalculable blessings on the world.

I am, &c.

JOSEPH SAMPSON GAMGEE.

16, Upper Woburn-place, April 26th, 1857.

PHLEGMASIA DOLENS AFTER FEVER.

[To the Editor of the Medical Times and Gazette.]

SIR,—I observe in your "Hospital Notes" of to-day a short account of a case of phlebitis after typhoid fever, under the care of my friend, Dr. Risdon Bennett. This is one of the most interesting sequelæ of continued fever. I offer a few remarks upon it, in the hope of inducing other observers to state the results of their experience.

During the memorable and destructive epidemic of typhus, which prevailed in Glasgow from October, 1836, to May, 1838, phlegmasia dolens and purulent deposits in the joints were by no means rare sequelæ of typhus. Though I cannot at present state the number of these cases witnessed by Dr. A. Anderson and myself, having mislaid my clinical notes, I think I am under the mark when I express my conviction that there could not be fewer than eighteen or twenty. The phlebotic symptoms were uniformly developed in the advanced stage of the fever, after the crisis or during convalescence. The phlegmasia dolens, as in Dr. Bennett's case, occurred after mild attacks of fever; and, though always attended with great—sometimes enormous—swelling and tension of the affected limb, was in general unaccompanied by much constitutional disturbance, and slowly subsided, leaving a hard, impervious cord in the situation of the femoral vein, where the tenderness had been more or less acute during the inflammatory stage. The pallor of the skin was universal in these cases, though, of course, most marked in the œdematous limbs. I do not recollect that in any of them nausea, vomiting, or jaundice, was present; and my impression is that, in the majority of cases, the termination was favourable.

Not so in those where the joints were affected. This complication generally occurred in cases of the lowest and most malignant type, and was invariably fatal. Ushered in by severe rigors, great præcordial anxiety, feeble, indistinct, and exceedingly rapid pulse, and general tenderness of the surface, the affection soon became localised in the larger joints, and was, I think, *always* accompanied by more or less

jaundice, and frequently by profuse perspirations. In some cases, scarcely a joint escaped, many even of the smaller ones being filled with glairy pus. After having watched and dissected two or three such cases, a single glance at patients similarly affected was sufficient to decide our prognosis.

What was the cause of these formidable complications? I am not prepared to speak positively as to the absence, presence, or extent of bedsores in these cases, though in some of them I am persuaded that no bedsores existed. But in *all* of them the fever was typhus, not typhoid, as Dr. Bennett's case is stated to have been. I know not what the unrecorded experience of others may be, and have not recently refreshed my memory by consulting writings once very familiar to me; but, though I have seen and observed not a little of typhoid fever—or, as the Germans call it, *abdominal typhus*—in Glasgow, Paris, Berlin, and London, I have never yet, so far as I know, seen phlebitis occurring as a sequela in that type of continued fever. This is the more remarkable, as in Glasgow the ulceration of the intestinal glands, both aggregate and solitary, the suppuration of the mesenteric glands, and the size of the perforations, which in several cases brought on rapidly fatal peritonitis, far exceeded anything I have since witnessed; yet in typhus, where no trace of intestinal or mesenteric ulceration existed, phlebitis was by no means an uncommon sequela.

Those of your readers who belong to the "exact school" may think that, in the foregoing remarks, I have dealt too much in impressions. It may be so; yet I believe my impressions are in the main strictly accurate. This attempt to record them has revived a desire I long cherished to give some account of the various sequelæ of continued fever. If I can recover my notes, or induce my old friend and fellow-worker, Dr. Andrew Anderson, who is on the spot, to act the part of resurrectionist among the mummied case-books of the Glasgow Fever Hospital, and record the results of his search in your columns, I believe the narrative will be both interesting and instructive.

I am, &c.

Grosvenor-street, April 24, 1857.

A. P. STEWART.

THE TWO PLATES OF THE SKULL IN FRACTURE.

[To the Editor of the Medical Times and Gazette.]

SIR,—As I have not occasion to read many surgical works, I may be unwittingly reproducing a notorious thought, and you may rightly think it better to assign this letter to the fire than to trouble your readers with it. But I have felt prompted to send it, because, though the idea on which it rests is so simple, I can scarcely believe it to be new. The fact of the greater liability to fracture of the inner plate of the skull has again been forcibly brought before us in your report of the proceedings of the "Army Medical and Surgical Society," without any remark as to the supposed cause, and our leading review lately selected for emphatic commendation a passage from a standard work on Surgery, which affirmed that it is not a greater *brittleness* of the inner plate which occasions it to crack first, but the circumstance that the direction of the blow is usually from without inwards.

Now, I do not demur to the position that, of the two tables, that is more liable to break which is on the distal side of the blow, but to the mechanical reasons given for that liability.

I will endeavour to explain familiarly the *modus operandi* of the accident, as it appears to my comprehension:—

If we bend a partially pliant stick across the knee until it splinters, the fibres will first break which are furthest from the knee; for the stick can only bend by the nearer side becoming shorter than the other, and, if it happen to be of a material which hardly permits of the elements of the longitudinal fibres approaching each other more intimately, the difference in length can only be consummated by a greater separation between the elements of the more distant fibres; that is, from the thickness of the stick, the fibres which are on the side which is becoming convex are exposed to a greater strain in the direction of their length, and must, therefore, sooner snap asunder. Whether we would straighten a stick which has grown crooked, or bend it still more, the more distant fibres must relatively be stretched more than the nearer, and must break sooner.

Now, remembering that concussion is nothing but *quick* compression, we may readily apply this homely illustration to the case of the skull. When it is depressed, permanently or transitorily (recovering its form by the elasticity of some por-

tion of the plates), at any spot the tenacity of the inner plate must be more severely tested than that of the outer.

I am, &c.

A PHYSICIAN.

PROTRACTED BIRTH OF A SECOND TWIN.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your Journal of January 24, I have read Mr. Prideaux's communication respecting the protracted birth of a second twin, as well as one in reply from M.R.C.S., L.A.C. and L.M., in your Journal of January 31.

You will oblige me by the insertion of the following similar case which occurred to me, together with an observation or two in reference to the cases of the gentlemen above referred to.

On February 21, 1846, I was called to attend on Mrs. M. in her first parturition, and remained with her part of the day and the whole night, when she gave birth to a fine female child: and on making pressure over the uterus shortly after, with a view to its contraction and expulsion of placenta, I discovered a second child. The placenta came away in a few minutes, the pains ceased, and the case went on as if there was no second foetus. The milk came on the second day, Mrs. M. nursed her child, the lochia succeeded, and I considered I was justified in not interfering in any way; and sought the opinion of a brother Practitioner, who backed my proceedings. I continued to visit her daily, and four days after was again summoned; and four hours after arrival she gave birth to the second female foetus, without any unfavourable symptoms.

It seems unnecessary to state that in any similar case I should observe the "non-meddlesome plan" precisely as in this instance, consequently I consider M.R.C.S.'s strictures on Mr. Prideaux's (to me) right mode of procedure, rather severe.

I am anxious to occupy as brief a space in your columns as possible, or I should enter more into detail as to the mode of treatment in my case, and to explain some of the causes, as I believe, of the detention, if I may so term it, of the expulsion of the second foetus, which, perhaps, may have been the case in the two cases under notice.

I am, &c.

Thrapstone.

B. SPURGIN.

MALPRAXIS AT LOWESTOFT.

[To the Editor of the Medical Times and Gazette.]

SIR,—Having been present during the greater part of the trial of Matcham for manslaughter at the last Bury Assizes, I can most fully bear out all you have said of the unjustifiable attack made upon Mr. Worthington by the counsel for the defence.

I have heard many trials in a court of justice, but never one which gave me greater pain than this. For two hours every species of abuse and imputation was cast upon one of the most respectable practitioners in the county of Suffolk. Every fatal case of midwifery which could be raked up in a thirty years' practice was paraded before the jury. Every motive that was dishonourable was imputed to the medical witnesses, while the prisoner at the bar was lauded to the skies! He had attended 200 children in six years! Such a thing was never heard of! Even his personal appearance was contrasted favourably with that of Mr. Worthington, by the most unwarrantable license of language, which ought to have been—but was not—stopped by the Judge.

By this sort of inflammatory language, and by the extraordinary summing up of the Chief Baron, which followed, no surprise need be felt that the man was acquitted; and still less that he should have been treated as a martyr, and that an indignation-meeting of some six or seven thousand people should have been held at Lowestoft after the said martyr's return, to exalt quackery, and abuse the medical profession.

I will make no apology for asking for a short space in your columns for one or two remarks upon this remarkable case, because it well exemplifies the position which quackery at present holds in the eyes of legal men, and its relation to the public and medical profession.

In the first place was this Matcham qualified by education and examination, either in this or any other country, to practise the science of medicine?

This question may be answered, without the slightest doubt, in the negative. His own statement was, that he was examined by some person in London, and had a diploma granted him. This thing called a diploma was in court. Would it not have been to the interests of justice that it should have been produced?

It was a framed document, with a good many flourishes about it, and headed "Reformed Medical Society" or "Association." I could not see distinctly which but it certainly was not the diploma of a university.

Instead, however, of clearing up the matter, the Chief Baron, in summing up, *assumed* at once—that the man was qualified! his words were: "We need not, in a charge of this kind, be very restrictive in our views as to where the qualification has been obtained, even if the party charged has crossed the Atlantic to obtain it."

It is quite true that, legally speaking, a qualification, however high, would not save a practitioner from punishment, if death were occasioned by his want of skill.

But there is no doubt but that the *chance of conviction* would be materially increased, if it were proved that the injuries were the results of ignorance, or the want of Medical education. If a man's statement, that he had a diploma, is to be the ground upon which a Judge is to direct the Jury that he is qualified to practice medicine, there is an end at once to the distinction, in a legal sense between the man who possesses the highest qualification and the veriest quack that was ever permitted to kill and slay his fellow-creatures.

I need not ask, Did the injuries described by the Medical men cause the death of the woman, and were those injuries the result of a want of skill and knowledge in the accused? as you have so fully treated this part of the subject; but let me ask, although the Judge strongly animadverted upon the "false etiquette" which had prevented the Medical men meeting this Matcham in consultation, if any person not a barrister were to put on a gown and wig, would the learned Judge permit him to attempt to save the life of a man tried for murder? or would the Bar meet such an one in consultation?

Suffolk, April 20.

I am, &c.

Crito.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, March 17.

(Concluded from page 373.)

Dr. BARKER showed a specimen of

DISEASED HEART.

W. T., a clerk, aged 16, about five feet two inches high, and of small size, had been subject to attacks of rheumatism for eight years; and he had suffered much from dyspnoea and palpitation, with anasarca of the legs and abdominal parietes, for four months before he was admitted into St. Thomas's Hospital on January 27, 1855. He had then symptoms clearly indicating great hypertrophy of the heart, the impulse being very great, and the cardiac dullness extending from the third rib to the lowest part of the sternum, and from half an inch to the right of the sternum to two inches to the left of the nipple. A loud double bruit was heard over the whole upper and anterior part of the chest, loudest over the aortic valves; and a loud systolic bruit at the apex and below it. Strong pulsation, with a distinct thrill, was felt above the sternum, and the right clavicle. There was a considerable amount of fluid in the left pleura; but this, as well as the general anasarca, diminished greatly under the use of diuretics and purgatives. He died on the 1st of March.

The heart filled the whole anterior part of the left side of the chest below the third rib, and extended to the right of the sternum. This great enlargement was due almost exclusively to hypertrophy and dilatation of the left ventricle, the walls of which were five-eighths of an inch thick, and very firm. The aortic valves were thickened, and were puckered along their free edges. The mitral valves were also thickened, but would probably have been competent, had not the chordæ tendinæ and columnæ corneæ been very short in proportion to the size of the ventricle. The two auricles and the right

ventricle appeared little more than appendages to the left ventricle. The ascending aorta was slightly dilated, but not otherwise diseased. The innominate and the first inch of the right subclavian were much dilated. The heart weighed two pounds.

Mr. SYDNEY JONES exhibited

TWO SPECIMENS OF CYSTICERCUS FASCIOLARIS FROM THE LIVER OF THE MOUSE.

One was about an inch and a half in length, gradually tapering from the anterior to the posterior extremity, in which latter situation was a terminal cyst about the size of a pea. With this specimen was the cyst on the under aspect of the liver from which the animal had been removed. The other specimen was a much larger one, being between six and seven inches in length. It had the same form as the other; the segmentation, however, was much more distinct, and the terminal cyst somewhat smaller. These were not brought forward on account of their rarity, but on account of the unusual size to which the larger animal had attained, whilst in its encysted condition.

Mr. SYDNEY JONES also showed a specimen of

MALIGNANT TUMOURS OF THE BRAIN.

They had been removed from the brain of a woman, aged 48, who about two years previously had suffered from encephaloid disease of the breast. This breast was removed, and the patient went on well till last November, when she began to complain of very severe pain in the head, incessant, and always referred to the vertex. This was the only symptom till some little time before her death, when motion began to be impaired on the left side, and she had occasional convulsive attacks. After death only the head was examined; embedded in the left hemisphere was a tumour about the size of a marble, resting upon the corpus callosum, and projecting somewhat into the longitudinal fissure. A smaller one, about the size of a bean, was found on the outer side of the right corpus striatum. The tissue of these tumours was firmer than that of the brain tissue, in which they might be felt as comparatively hard nodules. Their section was of a yellow colour, and yielded a copious creamy juice. The cerebral substance in their immediate neighbourhood was much softened; and its red colour showed its increased vascularity. A microscopical examination showed nuclei, round or oval, varying in size from the $\frac{1}{2500}$ to $\frac{1}{225}$ of an inch in diameter, with or without a nucleolus. Some few of them were clear, or only very minutely granular; but the greater number were filled with dark oily matter. Besides these were cells, generally of very large size, containing a number of nuclei. The largest had a diameter of $\frac{1}{330}$ of an inch, whilst the smallest were only $\frac{1}{1000}$ of an inch. The larger ones, however, predominated, and generally contained three or four large nuclei ($\frac{1}{330}$ of an inch in diameter), each nucleus having a nucleolus, large and distinct, and varying from the $\frac{1}{2500}$ to the $\frac{1}{1250}$ of an inch in diameter. In the growing part of the tumours, *i. e.* at their circumference, the cells were most abundant; and it seems that in them granular matter is afterwards collected, and that they eventually burst and discharge their nuclei and granular matter.

Mr. HUTCHINSON showed a preparation from a case of

SPINA BIFIDA WITH HYDROCEPHALUS.

The subject of the case, a little boy, aged 15 months, had, died in consequence of the spontaneous rupture of a large sacral spina bifida. Mr. Hutchinson had seen him about a fortnight prior to death, in consultation with Mr. Marsh, of St. John's-street, who had attended the case from the time of birth, and to whom he was indebted for permission to bring the specimen before the Society. At the time of birth the tumour, which covered the lower sacral region, did not bulge much, but not long afterwards it began to fill, and the infant's head also enlarged. In spite of these affections, however, the child grew, and appeared of average intelligence. His lower extremities were wasted, and the feet drawn upwards (talipes calcaneus). On several occasions the question as to propriety of puncturing the tumour with a fine trocar was entertained, but always decided in the negative, on account of the existing cranial disease. The head went on increasing, until it became fully twice the natural size. Two weeks prior to death the spina bifida was as large as a foetal head, and the skin over it stretched and very thin. A few

days later it gave way and collapsed. The fluid drained away by a mere pin-hole opening, and no suppuration occurred. The drain however was more than the infant's strength could bear, and it sank from exhaustion. Some diminution in the size of the head had been noticed during the last few days of life. At the autopsy the lateral ventricles of the brain were found distended by more than a pint of clear serum, the septum being wholly destroyed. The ventricle of the medulla oblongata was also distended, and passing down from its lower extremity was a canal about as large as a crow-quill, which ran the whole length of the medulla in its centre, and terminated in a large bag of arachnoid membrane, which hung in the cyst of the spina bifida. This sac, which would have held a pigeon's egg, had no communication with the larger cyst, and evidently consisted of the terminal prolongation of the ventricular lining membrane. The spina bifida itself presented nothing unusual. The laminae of the sacrum were wholly wanting, and several nerves of some size were attached to the walls of the cyst. Excepting one or two flakes of lymph, there were no evidences of inflammation. Mr. Hutchinson remarked upon the interest which attached to the canal which passed the whole length of the cord connecting the cerebral ventricles with a serous sac at the cauda equina. It was no doubt a relic of foetal structure, and evidence of the tendency to effusion into the cerebral and spinal cavities having existed during intra-uterine life.

Mr. HUTCHINSON also showed for Dr. Sloane, of Leicester, a specimen of

LARGE CYST IN THE WALLS OF THE STOMACH.

The patient from whom it had been removed was a man, aged 33, who had died of fever in the Leicester Infirmary after a short illness. At the autopsy, on pouring water into the stomach, it was noticed that it did not pass through the pylorus; and on examination it was found that a tumour, the size of a large cherry, fitted as a valve over the gastric aspect of the opening. This proved to be a cyst, capable of containing about a pigeon's egg, and filled with an opaque fluid, which glittered with plates of cholesterine. The cyst projected externally, as well as into the cavity of the stomach, and was of nearly equal size on each side. The muscular coat appeared to have been perforated. There were no signs of inflammation either in the serous or mucous coat. No symptoms of obstruction had existed during life, and there had been no vomiting, a circumstance which was explained by the fact that the fluid in the cyst yielded to pressure, and might be easily forced into the sac on the exterior of the stomach.

NORTH LONDON MEDICAL SOCIETY.

APRIL 8, 1857.

Dr. JENNER, President, in the chair.

The PRESIDENT read a paper on

SOME VARIETIES OF TYPHOID FEVER.

He commenced by stating that the doctrine of the specific or practical difference between typhus fever, typhoid fever, relapsing fever, and febricula is now inculcated in almost every large medical school in Great Britain; that in America it is all but universally received; that in France it is taught in every medical text book; and that it is adopted in Germany by Professor Greisinger of Tubingen (formerly an advocate of the old idea) in his article "Fever" in Virchow's great work on the practice of medicine, now publishing. After stating that typhoid fever was in England one of the most common severe acute diseases, he sketched a typical case of typhoid fever, and then stated that the deviations from the type are the results—

1. Of differences in the severity of the disease as a whole.
2. Of the absence of particular symptoms.
3. Of the unusual severity of particular symptoms and lesions of structure.
4. Of the presence of complications.

The author then described at some length the varieties of typhoid fever, known as latent typhoid fever, brain fever, nervous fever, gastric fever, bilious fever, and infantile remittent fever, illustrating his description by abstracts of cases.

QUARTERLY RETURN OF BIRTHS AND DEATHS IN ENGLAND.

IN January, February, and March, 1857, the marriages of the year 1856 rose from the depression of 1855, and took place at the average rate. In the winter quarter of 1857 the births have exceeded the average number, and the rate of mortality has been much lower than the average. The sanitary state of the country has been better in the last two winters than in any two successive winters of which we have authentic records.

Births.—The births of 170,381 children were registered in the quarter that ended on March 31st, 1857; and the birth-rate was 3·599 per cent. per annum, the average rate of the quarter being 3·507. The conceptions in England are most numerous in spring and summer; the births in winter and spring. The number of births was greater in the last winter than the number in any previous quarter, except the spring of 1854 and of 1856.

Increase of Population.—As the births in the first quarter of the year amounted to 170,381, the deaths to 108,527, the natural increase of population in England and Wales in 90 days was 61,854, and probably somewhat more, as the whole of the births are not registered. The natural increase in the population of the United Kingdom was probably at the rate of 1000 a day. 35,007 emigrants sailed in the same 90 days from the ports of the United Kingdom at which there are emigration agents, and it was ascertained that 14,814 of the emigrants were of English origin; to which 1045 may be added for the due proportion of 2305 emigrants whose origin was not distinguished. 9551 of the English emigrants sailed to the Australian colonies, 6264 to the United States, and only 44 to the North American colonies and all other places.

State of the Public Health.—108,527 deaths were registered in the winter quarter of this year, and the annual rate of mortality was nearly 23 in 1000, against the average of the season 25.

Health of the Country.—The following are some of the notes of the Registrar-General:—The Registrar of Bradwell (Maldon), complains that he has every quarter to record one or more deaths not certified by a medical attendant. "They occur," he says, "among persons belonging to a sect called 'Newlights,' who always refuse to call in medical assistance." The deplorable neglect of sanitary measures, and the extent to which the lives of the poor people of Dudley are sacrificed, may be inferred from this one appalling fact: "Small-pox was fatal in fifty-one cases!" The children of Coventry are still dying off rapidly; but it is gratifying to learn that the municipal authorities and the Medical men of the town have made some inquiry into the causes, which it may be hoped will ere long be mitigated.—The population of Leicester is dense, and the mortality was at the annual rate of 27 in 1000 during the ten years 1841—50. The deaths in the ten years 1841—50 were 14921, of which it was computed in the Sixteenth Report that 5575 were unnatural deaths, or the results of the insalubrities in which the people of Leicester lived. The borough, under the circumstances, appointed an intelligent health officer. The system of deep sewerage was completed in 1855, and the sewerage was deodorized. The river, which was the receptacle of nearly all the filth of the town, is now comparatively pure. The courts, which were covered with stagnant water, are now clean. The people who reside over the deepened sewers enjoy improved habitations. The annual mortality in the three years 1852—54 was at the rate of 29, 27, and 25; while in 1855—56 it fell to 23 and to 21 nearly in 1000. Small-pox has been completely disarmed by vaccination.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise, April 23d, 1857.

BROADBENT, JOHN, Cheetham-hill, Manchester.

MARSLAND, ROBERT, Manchester.

ROGERS, OWEN OSSIAN, Stonehouse, Plymouth.

SLIGHT, GEORGE, Ormeston, Haddingtonshire.

SMITH, WILLIAM HENRY, Holland-place, Clapham-road.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 24th inst. :—

BOTT, T. B., Bury, Lancashire.

BROADBENT, J., Cheetham-hill, Manchester.

BUCKLEY J., Cheetham-hill, Manchester.

CORNISH, K. H., Oxford.

DAY, E. E., Acton.

FURSE, R., South Molton, Devon.

HARRIS, A. B., Mevagissey, Cornwall.

HOUSTON, J. M., Edinburgh.

JONES, W. G., Birmingham.

LANGLEY, N. B., Stanmore, Middlesex.

MERRYWEATHER, H., Sheffield.

METCALFE, R. J., Tydd St. Mary, Lincolnshire.

SMITH, W., Preston.

WILLIAMSON, J. E., Nantwich, Cheshire.

The following gentlemen were admitted members on the 29th inst. :—

BALMFORTH, J., Wakefield.

BAYLEY, J., Odiham, Hants.

MAUGHAM, W., Carnarvon.

OWEN, T. O., Anglesey.

L'ESTRANGE, E., Parsonstown, Ireland.

MAC DOUGAL, A. M., Wyndford, near Glasgow.

DEATHS.

DAMPIER.—April 26th, in Bryanstone-street, Portman-square, Nathaniel John Dampier, Esq. The deceased gentleman was a Fellow by examination of the College of Surgeons. He practised in London as a consulting surgeon a few years ago, but his health gave way, and he took up his residence at Bath, where he hoped to recover, but continuing to lose ground, he came to town a few days before his death, with the view of obtaining further medical assistance, when he was very suddenly seized with erysipelas, which destroyed life in a few hours. He was devoted to his profession, and had had considerable experience and success as an operating surgeon. He was educated at Guy's, and was only 36 years of age.

ROBERTSON.—At Dunkeld, on the 22nd inst., Mr. Donald Robertson, Surgeon.

ST. GEORGE'S HOSPITAL.—A Dentist was elected to this Hospital on Wednesday, and Mr. Vesey of Bond-street was selected by ballot from six candidates.

ST. MARK'S HOSPITAL.—On Saturday evening the anniversary festival of this institution was celebrated at the London Tavern, under the presidency of Mr. Alderman Copeland, M.P. About 150 gentlemen sat down. The company endorsed their opinion of the merits of the Hospital by a most liberal subscription, amounting in all to upwards of 2200*l*. Among the legacies was one from the late Sir B. Outram, M.D., which the committee thankfully accepted as an augury that henceforth an ampler portion of professional as well as public sympathy would be found flowing steadily and increasingly towards this charity. The committee also stated that the charity would shortly be called upon to make an important addition to the present hospital staff—a measure rendered imperative by the daily increasing entreaties for admission to the institution. The total number of patients admitted during the past year had been 695; greatly relieved, 218; considered as incurable, 10.

ROYAL HOSPITAL FOR THE PERMANENT CARE OF THE HOPELESSLY INCURABLE.—Mr. Charles Dickens has consented to preside at the Annual Dinner of this excellent institution next June.

ASYLUM FOR IDIOTS.—At the Annual Meeting this day Sir George Carroll announced that a special donation of one thousand pounds had been received.

PLAN FOR A SANATORIUM.—The Institute of British Architects announce as a subject for a future prize: "The best design, in not less than five drawings, for—a marine sanatorium, or building for the temporary residence of a limited number of convalescents belonging to the middle and upper classes of society."

DURHAM UNIVERSITY.—At a Convocation, holden on Tuesday, April 21, the following Examiners in Medicine were nominated:—The Reader in Medicine; the Lecturer in Chemistry; Henry Wentworth Acland, M.D., Dr. Lee's Reader in Anatomy in the University of Oxford; John E. Erichsen, F.R.C.S., Professor of Surgery in University College. A grace was passed, to make an alteration in the regulations, enabling Medical Students to keep their residence in the University either at the commencement of their studies, or at a later period of their Medical course.

EFFECTS OF BRINE IN FOOD.—Last year, in consequence of accidents arising out of the use of brine in food, the Council of Health of Paris inquired into the subject. The following is from their report:—"The use of brine as a condiment or seasoning in the nutriment of man has hitherto had no injurious effect, and nothing authorizes the opinion that an economical process so advantageous for the poor should be proscribed. The same is not true of the abuse which is made of this substance in the nourishment and in the treatment of the diseases of certain animals, especially swine and horses. Authentic facts and recent experiments show that the mixture of brine in considerable quantity with food may produce real poisoning. In all cases, brine preserved too long, or in contact with rancid meat, should be employed with the greatest care, and after it has been purified by skimming off all the scum which forms on the surface."

MR. ERASMUS WILSON.—Mr. Andrew, the assistant-surgeon to the St. Pancras Infirmary, has written a letter to the *Times*, in which he states that as Mr. E. Wilson was riding in his carriage on the 22nd inst., an alarm was suddenly raised that a woman had thrown herself into the Regent's canal. The carriage was stopped, the coat and waistcoat quickly thrown aside, and rushing to the water's edge, Mr. Wilson plunged in after her, and almost succeeded in bringing her to the banks, when he found himself fast sinking from the increasing weight of his boots and trowsers, owing to the contact of the water. Disengaging himself, however, he, with great exertions, once more gained the land, but, although almost exhausted, he obtained one end of a rein from a bystander, again plunged in, and this time happily succeeded in bringing the body of the almost lifeless woman to the shore. She was conveyed in a semi-conscious state to St. Pancras Infirmary, where, by the use of continued friction, stimulants, &c., she was quickly brought about. We are happy to give publicity to such an act as this.

OZONE.—Schoenbein, pursuing his experiments on ozone, shows that an alcoholic solution of two kinds of mushrooms—*Boletus luridus* and *Agaricus sanguineus*—colourless in itself, turns blue under the influence of ozone; and that the expressed juice of these same mushrooms contains an organic matter capable of transforming oxygen into ozone.—A series of test-experiments for ozone, made last year at Birmingham, confirm the conclusions arrived at in other towns in England and on the continent. "When the wind blew from the country," says the observer, "a fair, or probably a full quantity of ozone was indicated; but when the current of air had passed over the town, or came from the colliery district, there was no indication of it, excepting in high winds, when traces of it were noticed."—Professor Rogers of Boston, United States, from a similar course of experiments, inclines to believe that the presence of ozone is dependent on certain winds. During easterly or southerly winds, for example, he found ozone to be nearly or quite undiscoverable, but abundant on a change to the west or north-west.

MEDICINE IN SIAM.—It appears from Dr. Bowring's "Siam" that the Siamese, though they have much confidence in their native doctors, yet follow a custom for the protection of the patient, of which the simple condition is "No cure, no pay." A negotiation is entered into as to the sum to be paid for the cure, and the amount is settled by a written contract, the doctor always demanding two wax candles for an offering to the God of Medicine, and six salungs (equal to 3s. 9d.) for the cost of medicines. If the patient's health improve under the doctor's care the visits continue; if the doctor thinks the case hopeless, his visits cease, and there is an end of the contract. There are two medical schools or systems in Siam—the Indian and the Chinese—which contend for the mastery; and the following, which is a prescription for "morbific fever," is said to combine the pharmacopœia of both:—"One portion of rhinoceros's horn, one of elephant's tusk, one of tiger's and

the same of crocodile's teeth, one of bear's tooth; one portion composed of three parts bones of vulture, raven, and goose; one portion of bison's and another of stag's horn; one portion of sandal. These ingredients to be mixed together on a stone with pure water. One half of the mixture to be swallowed, the rest to be rubbed into the body; after which the morbid fever will depart."

SIR JAMES L. BARDSLEY, President of the Manchester Medico-Ethical Association, entertained the members of that body at dinner on Thursday, April 16, at the Waterloo Hotel in Manchester. Nearly forty gentlemen were present, and a very social and agreeable evening was passed under the chairmanship of the distinguished President.

MANCHESTER MEDICO-ETHICAL ASSOCIATION.—The following Memorial is worthy of attention. To the Honourable the Commissioners for inquiring into the expediency of altering the Circuits of the Judges in England and Wales, the Memorial of the Manchester Medico-Ethical Association respectfully sheweth, That the Medical profession in this district has long complained of the serious inconvenience that attends the holding of Assizes for the Hundred of Salford, in Liverpool; a distance so great from Manchester as to preclude medical men from returning home daily to attend to their patients, however urgent and serious their cases may be. That the appointment of a substitute, in place of the ordinary medical attendant, in cases of severe or complicated sickness, is often fraught with incalculable risk and danger. That medical men are consequently, and unavoidably, drawn into most painful positions, not only affecting the moral obligations that subsist in relation to their patients, but seriously involving their professional interests. That the profession entertains a strong sense of the injustice committed on the part of the authorities who regulate the scale of fees as applied to medical witnesses. That the fee allowed is not supposed to be a remuneration for the evidence of a *scientific witness*, but simply to meet the incidental expenses of the day. That medical men would urge the validity of their claim to be regarded as giving *scientific evidence* in the exercise of their profession; and that, as a consequence, the fee should be proportionate to their value and importance as *scientific witnesses*. That in the event of assizes being held in the city of Manchester, the fee would become a subordinate question; and the equitable claims of the profession in this respect must be considerably modified by the greater convenience that would result; and by the removal of injuries that now press so heavily upon all medical men residing in the district. Your memorialists therefore pray that you will be pleased to take their representations into your consideration, and your memorialists venture to express their confident hope that you will recommend that assizes for the Hundred of Salford be holden at Manchester. And your memorialists will ever pray, etc. Signed on behalf of the Manchester Medico-Ethical Association.

JAMES L. BARDSLEY, Knt., M.D., *President*.

JOHN ROBERTON,

THOMAS RADFORD, M.D.,

JOSEPH STONE, M.D.,

JONATHAN WILSON,

} *Vice-Presidents*.

} *Honorary Secretaries*.

17th April, 1857.

STRYCHNINE.—The following paragraph has been going the round of the papers:—"Some weeks ago a curious instance of the deadly power of that vegetable poison, nux vomica, or strychnine, took place at Wollaton, near Nottingham. Rats infested the premises occupied by one of the gamekeepers in the employ of Lord Middleton to such an extent that the keeper deemed it advisable to have recourse to the poison above named, which, of course, had the desired effect. The dead bodies of the rats were thrown upon a heap of manure, and when in a state of decomposition were partly consumed by the keeper's poultry, which immediately fell a prey to the power of the poison and died. This instance of the strength of the poison remaining in the dead bodies of its victims for so long a time, ought to be a warning to the public, since it shows that the dangers incident to its continuance in the body after death should be guarded against with the utmost care." This does not prove that the strychnine absorbed into the tissues of the rats poisoned the fowls, because they probably swallowed the stomachs of the rats, which actually contained the poison.

ARTIFICIAL SAPPHIRES, CRYSTALS OF ALUMINA.—M. A. Gaudin last week communicated to the Academy of Sciences a process for obtaining alumina (the clay which yields the new metal called aluminium) in transparent crystals, which therefore present the same chemical composition as the natural stone known under the name of sapphire. To obtain them he lines a common crucible with a coating of lamp-black, and introduces into it equal portions of alum and sulphate of potash reduced to powder and calcined. He then exposes it for a quarter of an hour to the fire of a common forge. The crucible is then allowed to cool, and on breaking it the surface of the lamp-black coating is found covered with numerous brilliant points composed of sulphuret of potassium, enveloping the crystals of alumina obtained, or, in other words, real sapphires. The size of the crystals is large in proportion to the mass operated upon; those obtained by M. Gaudin are about 3-100ths of an inch in diameter, and half this in height. They are so hard that they have been found to be preferable to rubies for the purposes of watchmaking.

LIST OF DIETARIES FOR CONVICTS.—Returns of the dietaries sanctioned by the Government for convicts at Gibraltar, Bermuda, and the different convict establishments of every class in England and Wales, and the dietaries in the military prisons, and the county gaols of England and Wales, have been printed by order of Parliament, and occupy a paper of 140 pages.

THE BUTTER WE EAT.—A quantity of butter which was seized at the shop of a dealer in Liverpool a few days ago by the officers of the Health Committee of the town-council, was found, on being analysed, to be thus constituted:—Butter, 47·4; salt, 23·4; nitre, 0·8; vegetable matter, derived from Irish moss or other seaweed, with water, 28·3; total 99·9. The butter (save the mark!) is an importation from America, so that the manufacturer will escape that punishment to which, were he a British subject, he would be liable.

DEATHS IN HOSPITALS FOR THE PAST QUARTER.—The following is the number of deaths registered in the following institutions for the 13 weeks ending March 28th:

	Total.	Males.	Females.
<i>General Hospitals.</i>			
St. Mary's	46	24	22
St. George's	73	49	24
Westminster	34	17	17
Charing Cross	28	18	10
Middlesex	60	28	32
University College	32	19	13
Royal Free Hospital	13	6	7
King's College	46	31	15
Hospital for Sick Children	19	10	9
St. Bartholomew's	162	99	63
London	81	56	25
Guy's	91	62	29
St. Thomas'	34	60	24
<i>Hospitals for Special Diseases.</i>			
Cancer	3	—	3
Small-pox	11	8	3
Fever	31	11	20
St. Mark's	—	—	—
Lock	—	—	—
Consumption	32	22	10
City of London for Diseases of Chest	9	8	1
<i>Lying-in Hospitals.</i>			
Queen Charlotte's	2	—	2
British	3	2	1
City of London	3	2	1
Hospital, York-road	2	—	2

DISCOVERY OF A FOSSIL SEAL.—A few weeks ago, the workmen at the Cupar Muir clay-pits laid bare the skeleton of an animal which has since been determined by Mr. Page to be that of a seal, and which must have been imbedded there when the Howe of Fife was an estuary, and the sea stood 120 or 150 feet above its present level. This is the only fossil specimen of the seal family which has yet been discovered; at least Prof. Owen, in his "British Fossil Mammalia," makes no mention of any of the Phocidæ having been found either in the Upper Secondary or in the Tertiary formations. The specimen now found is a young animal, apparently the *Phoca vitulina* (or a very nearly allied species), about 3 feet in length, and in a wonderful state of preservation—almost every bone being fit for the articulator, with the exception of the upper portion of the skull, which had been accidentally struck by the spades of the workmen.

THE SWISS STUDENTS AND THE FACULTÉ DE MEDICINE.—When hostilities seemed imminent between Switzerland and Prussia, several young Swiss who were studying medicine at Paris left the Schools to join in the defence of their country, and thus lost the benefit of two inscriptions or registrations. The Faculty of Medicine appreciating their patriotism, and the honourable cause of their absence, has decided that these young men shall be considered as not having been absent, so that the advantage of the inscriptions will not be lost to them.

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 25, 1857.

BIRTHS.

Births of Boys, 904; Girls, 884; Total, 1788.
Average of 10 corresponding weeks, 1847-56, 1582·9.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	539	526	1065
Average of the ten years 1847-56 .....	...	...	1048
Average corrected to increased population	...	...	1153
Corrected average for corresponding week in ten years 1847-56	539·8	507·9	1047·7
Deaths of people above 90 .....	..	4	4
Deaths in 13 General Hospitals	32	13	45

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Pop-ulation. 1851.	Small-pox.	Measles.	Scar-latina	Hoop-ing-Cough.	Dia-rrhoea.	Ty-phus
West	376,427	1	6	2	11	1	..
North	490,396	2	7	6	13	4	7
Central	393,256	..	7	4	16	5	2
East	485,522	..	8	4	5	3	14
South	616,635	..	2	4	12	4	6
Total ..	2,362,236	3	30	20	57	17	29

DEATHS REGISTERED DURING THE WEEK.

CAUSES OF DEATH.		In the Week ending Saturday, April 25, 1857.							Averages of Temperature and Deaths in 10 Weeks.
		Deaths of Persons.							
		AT ALL AGES.	of Years.	under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.	At 80 Years of Age and Upwards.	
Mean Temperature	Mean temp.	46° 6	Under 20	At 20 and under 40	At 40 and under 60	At 60 and under 80	At 80 Years of Age and Upwards.	45° 9	
ALL CAUSES	1065	515	146	172	186	46	1047 7		
SPECIFIED CAUSES	1065	515	146	172	186	46	1036 6		
DISEASES:—									
1. Zymotic Class	189	152	14	10	13	..	214 1		
2. Dropsy, Cancer, and others of uncertain seat ..	49	1	6	19	18	5	44 6		
3. Tubercular Class	204	79	69	44	12	..	203 5		
4. Of Brain, Nerves, etc. ..	122	59	11	19	27	6	122 7		
5. Of Heart, etc.	56	5	7	25	18	1	40 0		
6. Of Respiratory Organs ..	205	106	13	26	49	11	181 8		
7. Of Digestive Organs	73	38	6	9	19	1	59 9		
8. Of Kidneys, etc.	17	..	3	8	4	2	12 9		
9. Of Uterus; viz.—Puer- peral Disease, etc.	10	..	6	3	1	..	9 8		
10. Of Joints, Bones; viz.— Rheumatism, etc.	10	2	3	2	3	..	10 5		
11. Of Skin, etc. .. ..	..	..	..	..	..	..	2 3
12. Malformations	5	4	1	..	..	..	4 0
13. Debility from Premature Birth, etc.	23	23	..	..	..	..	24 1
14. Atrophy	37	31	..	2	4	..	27 1		
15. Age	31	..	..	..	12	19	44 5
16. Sudden	11	5	1	1	4	..	9 0		
17. Violence, Privation, etc. ...	23	10	6	4	2	1	25 8		
CAUSES NOT SPECIFIED .. ..	..	..	..	..	..	..	11 1

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29.882
Mean temperature	46.6
Highest point of thermometer	69
Lowest point of thermometer	28.2
Mean dew-point temperature	40.1
General direction of wind	S.W. & N.E.
Whole amount of rain in the week	0.32
Amount of horizontal movement of air in the week	590 miles.

TO CORRESPONDENTS.

Dr. Adams's second paper of Cysts of the Lower Jaw will appear next week.

C. H. will find Dr. Munk's List of the Presidents of the College of Physicians from 1518 to 1857 at page 295.

Mr. Briggs.—The question of Wages and Stoppagos is out of our province.

Philo-Chirurgus.—The irritability of bladder in the case described very probably depends upon the presence of a stone in the bladder. The patient should be sounded by some experienced surgeon.

CAUTION.

Mr. Hanks, of Beaumont-street, Mile End, has sent us a caution against three persons who visit Surgeons under various pretences, but really to steal—one, a woman about 28 years old, short, stout, and fresh-coloured, who says she has been sent by her mistress for advice—a man, about 50, who comes to inquire the fee for writing a certificate that an infirm relative may obtain a pension—and a middle-aged man, who offers test-papers and gallipots for sale.

THE LAST NEW AND IMPROVED PUFF.

A Correspondent informs us that a Surgeon in his neighbourhood who had caught cold had the prayers of the congregation asked for in his behalf by name on one Sunday, and a thanksgiving for his recovery offered on the following Sunday.

Mr. Henry Webb.—1. Candidates have the option of passing the Preliminary Examination in Classics and Mathematics, or of passing in Celsus and Gregory at the time of their general examination for the licence. 2. Without offering any opinion as to the merits of the works referred to, the reply is, that the examination comprises the whole of Gregory's *Conspectus Medicinæ Theoreticæ*, and the first four books of Celsus. 3. You cannot enter for the Hall and College in May, unless you have previously registered for the Winter Session. The registration takes place during the first fortnight in May.

Erratum.—In Dr. Minturn's letter on Endemic Disease in America, in our last number, instead of "Collapse and death invariably follow the injection of the diseased animal products," read frequently.

The case of assault reported in the *South London News* had better not be brought into more prominent notice. Such cases reflect discredit, unfortunately, not only upon the actors, but on the Profession to which they belong.

DR. FELL'S CAUSTICS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—“Fair play is a jewel,” so says the old adage, and I, in common with many others in the Profession, deeply regret to have seen one of your “Hospital Notes,” emanating especially as it does from the Cancer Hospital, devoted to a cut at Dr. Fell's treatment, and that upon the authority of a patient who, perhaps, may say the same of the Cancer Hospital at the next Charity under the roof of which she may desire to seek relief.

I have neither seen the patients in the Middlesex, nor heard their “screams, and cries, and moanings, so dreadful at night,” but I have seen many patients that I have had the pleasure of sending to Dr. Fell, and heard from them upon their return to me, either cured or relieved, that the pain of the applications was either so slight as to be easily borne, or in the worst cases, that eight or ten drops of laudanum were quite sufficient to afford relief. Our Profession is supposed to be a liberal Profession, and why not extend it to our Transatlantic brother? He appears here with two diplomas, of equal value to those of our own Colleges, and brings letters of the highest character from the most eminent Surgeons and Physicians of America, besides which he is, as it were, under trial at the Middlesex Hospital, and his jury is composed of honest and conscientious members of our own Profession, whose verdict we ought with patience to await. Without trespassing further upon your space,

I am, &c.

W. VESALIUS PETTIGREW, M.D.
H. F., F.R.C.S. of Eng.

7, Chester-street, Belgrave-square.

[The note Dr. Pettigrew alludes to did not emanate from the Cancer Hospital, and Dr. Pettigrew appears to forget that those who use secret remedies, whatever diplomas they may possess, are, or ought to be, regarded rather as charlatans than as legitimate practitioners.—Ed.]

B. W.—We have but too often good reason to complain of persons charged with offences at our police courts, giving themselves out as Surgeons or Medical Students. No such name as Joseph Laughton, who appeared at the Mansion House on Wednesday, occurs in the Medical Directory for the present year.

Dr. Barclay's Letter on the Prejudicial Effects of Chloroform arrived too late for insertion this week.

A Correspondent sends us the following circular, which was given him by a small tradesman at Aldershot. It speaks for itself:—

“Dr. A. Wilson, Physician, Surgeon, and Accoucheur, Woodbine Cottage, (near Mr. Twynam's,) Aldershot, may be consulted daily, at his residence till half-past ten o'clock in the morning. Dr. Wilson trusts, from an extensive experience of upwards of twenty years at home and abroad, to merit a share of public support and patronage. Parties requiring attendance are requested, if possible, to leave their name and residence in writing, to prevent mistakes. Messages left at Messrs. Allen and Co., Camp Dispensary, Aldershot, will have prompt attention. Dr. Wilson may be consulted daily, from 11 to 12 o'clock noon, and from 6 to 7 o'clock evening, at Messrs. Allen and Co. Vaccination daily. “Woodbine Cottage.”

THE PRUSSIAN OCULIST.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—If your correspondent “Amicus” had read “The Prussian Oculist,” he would have learned all that he wishes to know respecting the veritable qualifications of the Hofrath de Leuw. And, if he had considered that the little work is written by a Clergyman, who, as the book states, leaves his name and address with the publisher, he surely would not have asked if that clergyman's account be correct.

I am, &c.

J. C.

[Yet there are some curious accounts of the relations of clergymen with quacks.—Ed.]

Dr. Birch's letter is an advertisement of Mr. Barth's apparatus,

Dr. C—, Mr. N—, and other gentlemen who have written very strongly on the use, by the Surgeons of the Middlesex Hospital, of a secret remedy, are informed that we have deferred the publication of their letters until the official notice of the conduct of these Surgeons brought before the Council of the College of Surgeons be made public.

Mr. Carruthers.—Dr. Lintner's prescription is, 1 grain of tannin to 6 ounces of the *spiritus saponatus*. We have not received any communication from him on the subject.

COMMUNICATIONS have been received from—

Professor LAYCOCK, Edinburgh; Dr. ADAMS, Dublin; Dr. A. P. STEWART; Dr. MARKHAM; Dr. M'WILLIAM; Dr. WEST; Dr. MAUTHNER DE MANTSTEIN; Dr. WEBSTER; Dr. FORBES WINSLOW; Dr. LANKESTER; Dr. JOHNSON; Mr. SCOTT; Dr. DELAUNEY; Dr. SMART; Mr. WINDSOR; Dr. ILIFF; Mr. RHIND; Dr. HILLIER; Mr. STONE; Mr. WILSON; Dr. MINTURN; Mr. KEEN; Dr. BAINES; Mr. CARRUTHERS; Dr. SHAPTER; Dr. PETTIGREW; CHANCELLOR and VICE-CHANCELLOR OF THE UNIVERSITY OF LONDON; Dr. ARMSTRONG, Cork; Mr. WEBB; Dr. MOUAT; Dr. STONE; Mr. WILSON; Mr. SANDFORD; Dr. SAVAGE; Dr. NEVINS; Mr. MARTYN; Dr. FAIRLESS; Mr. JERVIS; Mr. ALEXANDER; Mr. G. A. TOWERS; Mr. C. BENNETT; Mr. WARBURTON; Dr. FYFE; Mr. M'BEAN; Dr. GOLDIN; Mr. MITCHELL; Dr. MARTIN; Mr. COOKE; Dr. BIRCH; Mr. CHEVALLIER; Mr. M'DERMOTT; Mr. HUGHES; Dr. BARCLAY; Mr. ADAMS; Mr. DEVENISH; Mr. BRITTON.

APPOINTMENTS FOR THE WEEK.

2. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; Westminster, 1 p.m.; King's, 2 p.m.; Charing Cross, 1 p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m.: Dr. F. W. Headland, “On the various Operations and Uses of simple Saline Medicines.”
ARMY MEDICAL AND SURGICAL SOCIETY, 7½ p.m.: Dr. Mouat, “On Gangrene in the General Hospital in Camp, after the assault of June 18.”

4. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.; Orthopædic Hospital, 3 p.m.

EPIDEMIOLOGICAL SOCIETY, 8 p.m.: José Fernandez da Silver Leão, Surgeon in the Portuguese Navy, “On the Cholera Epidemiy at the Island of Fago, in the Cape de Verdes, during 1855.”
ENTOMOLOGICAL SOCIETY, 8 p.m.
CHEMICAL SOCIETY, 8 p.m.:

5. Tuesday.

Operations at Guy's, 1 p.m.

PATHOLOGICAL SOCIETY OF LONDON, 8 p.m.

LINNÆAN SOCIETY, 8 p.m.

6. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 3 p.m.

HUNTERIAN SOCIETY, 8 p.m.: Mr. Hutchinson, “On the Treatment of Intestinal Obstruction.”
ROYAL SOCIETY OF LITERATURE, 4½ p.m.
GEOLOGICAL SOCIETY OF LONDON, 8 p.m.

7. Thursday.

Operations at St. George's, 1 p.m.; Middlesex, 12½ p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.

HARVEIAN SOCIETY, 8 p.m.: Mr. Birkett, “On Compound Fractures of the Skull.”
ROYAL SOCIETY, 8½ p.m.
ZOOLOGICAL SOCIETY, 8 p.m.
PHOTOGRAPHIC SOCIETY, 8 p.m.

8. Friday.

Operations at the Moorfields Ophthalmic, 10 a.m.; Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8½ p.m.

ORIGINAL LECTURES.

CLINICAL LECTURE

ON

RETENTION OF URINE FROM ENLARGEMENT OF THE PROSTATE GLAND,

AND ON SPERMATORRHOEA IN CONNEXION WITH IRRITABLE PROSTATE.

By JOHN ADAMS, F.R.C.S.

Surgeon to the London Hospital.

GENTLEMEN,—One of the most common causes of retention of urine is enlargement of the prostate gland: a week seldom passes in Hospital practice without a case of this description being admitted. I have nothing new to say upon this subject, but presuming that there may be some among you who do not understand it, I consider myself quite justified in directing your attention to it, especially as, a short time ago, a case of this sort was under my care in the wards. The prostate is very apt to become enlarged in old men, and it thus gives rise to a mechanical impediment to the escape of water from the bladder, causing retention of urine; or, as it very frequently happens, your attention is called to a patient who is said to have an irritable bladder, and who is continually passing a small quantity of water without obtaining any substantial relief: if the patient is an old man you at once suspect that he is labouring under the infirmity in question, and you conclude that the cause of this state of the bladder arises from its being overcharged with urine, and that, as in an over-full cistern, the water is constantly running in small quantities through the waste-pipe; you therefore pass a catheter, and at once draw off, perhaps, a quart of urine. The case is now clearly revealed, and you proceed to treat it just as if a complete retention existed. It is said, on high authority, that enlarged prostate is not the disease of the aged. I confess I do not understand this. I admit, however, that in the greater number of aged persons there may be not only no hypertrophy, but actually an atrophy of the gland; yet it most certainly happens that retention from this disease almost invariably occurs in old persons, and therefore, when called to cases of retention in the aged, we look instinctively to the prostate gland as the cause, and act accordingly. You are aware that both lateral lobes of the prostate become hypertrophied, but the left lobe is supposed to be more frequently affected than the right. It is as well to bear this in mind, as some modification in the passing of the catheter may be thereby necessitated. It is said that the middle lobe is frequently the seat of enlargement, and so, no doubt, it is; but that which is presumed to be the middle lobe has often nothing whatever to do with it, but is a growth springing from that portion of the gland which connects the lateral lobes of the prostate together, and which, in a book I published some time ago on the diseases of the prostate, I designated the "isthmus prostatici." This subject has been well considered by Mr. Thompson, who has given the result of numerous dissections of enlarged prostates, and this is one of the results of his inquiries. In the treatment, however, of these cases it does not much signify whence the enlargement proceeds, nor what is its nature; the catheter must be employed for the relief of the retention. You should, however, bear in mind the fact, that in enlargement of the prostate the bladder is often exceedingly irritable, and unable to retain even an ounce of urine. This condition can always be well made out by catheterization.

You must, therefore, pass a catheter; you may take a silver or elastic instrument; you may take one with a long curve or a short curve, or you may pass an elastic catheter with no curve at all. You are all familiar with the ordinary manœuvre required in passing a large prostatic catheter; you get the point down to the neck of the bladder, and then, finding an obstacle, you depress the handle, and thus tilt up the point, and the catheter then enters the bladder. It now and then will happen to you that you cannot get the ordinary prostatic catheter into the bladder, and you try other instruments with like want of success; you then use the elastic catheter, giving it the peculiar curve described and delineated by Mr. Hey by withdrawing the stilet after the point has reached the

prostate; still this will fail you occasionally, and you may exhaust your whole stock of curved instruments unsuccessfully, and you will be surprised to find that a moderate-sized elastic catheter, without the stilet, and made straight before its introduction, will pilot its way gradually between the lobes, and reach the bladder. I have so often seen this, that I really think it better to use the elastic catheter first of all. You cannot do any harm by it, which is more than can be said of the use of the silver instrument.

Now, if you fail in the introduction of the catheter, what are you to do? The patient must be relieved; and it is a rare thing, indeed, that a skilful Surgeon is baffled in relieving cases of retention of urine from enlarged prostates; but such cases I have heard of: I never saw it, but it has occurred to the most experienced, and will, no doubt, occur again. Should this unfortunately happen to you, you are recommended to push the catheter through the back of the prostate, and thus make a false passage. This operation is now and then fatal, but occasionally it happens that, if the false passage is maintained, the patient never suffers from any relapse, and considers himself cured permanently. In some cases, it has been thought advisable to puncture the bladder. I need scarcely remark, that the only situation in which the bladder can be advantageously punctured in these cases is above the pubis; but this you can only undertake when the hypogastric tumour is fully developed. The water is to be drawn off night and morning, or more frequently if requisite, and after some days the patient makes water himself; showing that retention has been immediately caused by some unusual distension of its bloodvessels, probably some congestion of the veins, which are so numerous around the gland, and under the mucous membrane about the neck of the bladder.

This condition of vessels also explains a symptom of very common occurrence in the cases now under consideration,—I mean hæmorrhage to such an extent as to redistend the bladder almost immediately; the bladder becomes intolerant of its contents, and you reintroduce the catheter, and you find a chamber-pot half full of fluid, so discoloured with blood as to look like blood itself. Don't be alarmed about this, you may assure your patient that it will speedily subside; and in the course of a few days, as in a case just discharged from the Hospital, the urine becomes as clear as ever. You may give a little mucilage with liquor potassæ and tincture of hyoscyamus, and in this manner allay the irritability of the bladder.

If you should have much difficulty in passing the catheter, and especially if your patient lives a long distance from you, you may tie the catheter in, and leave it in for a few days. This plan is not usually adopted, but I am sure it is a practice more conducive to the safety of the patient than the constant renewal of painful efforts to pass the catheter night and morning. I don't much like to give opium in cases of irritable bladder from enlarged prostate. It may, however, be advisable to give it. It is not unfrequently given to the detriment of the patient, in cases where the bladder is irritable from over-distension; it tends to increase the evil, as it rather allays the irritation, and thus favours the increase of the accumulation. It may, however, be justifiable even in these cases, as where the Surgeon is unable to pass the catheter, and is seeking further advice, as it is called; you may thus gain time, and the patient's sufferings being lulled by the opiate, the desire to micturate is not so urgent.

I am anxious to make a few remarks to you on the subject of spermatorrhœa as frequently connected with prostatic irritation; and I do this the more willingly because it is a subject that surgeons do not much like to handle. They rather are disposed to repudiate it as unworthy of their consideration, the consequence of which is that the cases of spermatorrhœa fall necessarily into the hands of those gentlemen who largely advertise in the Sunday newspapers. These journals teem with advertisements bearing on this subject, and the attention of young persons is directed to this complaint, and they are led to suppose that they are affected with a disease of which many of them are wholly innocent. Spermatorrhœa is a disease, and ought to be studied, understood, and treated as such. You will find it quite amenable to treatment if this is carefully, and I may say, scientifically conducted. There is no disease which produces so powerful an influence on the mind as this. When a patient enters your room to consult you on the subject of spermatorrhœa, you understand him at once by a single glance of your eye. Don't imagin', how-

ever, that all are cases of spermatorrhœa which are supposed by the patients themselves to be so; nine-tenths of such patients are free from the disease altogether, and on inquiry you will find that the only complaint many have to make is that perhaps once a fortnight they awake from their sleep with a seminal emission, and that this is wholly unattended with pain, and not followed by any inconvenience whatever. These are just the cases for the empiric. He first fosters and encourages the idea of disease, and then proceeds to cure a disease which really never existed. I need scarcely tell you that this affection is often merely an effort of nature to relieve herself.

I am satisfied in my own mind that in very many cases of supposed spermatorrhœa there is no emission of seminal fluid whatever. Such cases as those to which the following remarks are applicable are of this description; and they are exceedingly numerous. A patient will call on you, and with downcast eye or partially averted countenance, say that he is unfortunately the subject of spermatorrhœa, and that he is confirmed in his opinion by what he has read in books relating to this subject. You inquire into his case, and he tells you that whenever he makes water, it is always followed by a discharge of semen, and that this is especially the case when he passes a stool. You tell him that this is no decisive evidence of the escape of the secretion of the testes, but probably comes from the ducts of the prostate and the vesiculæ seminales. You ask him whether this discharge is accompanied with any sensation, and he answers, No. You are now confirmed in your opinion that he has no spermatorrhœa, for you may be quite certain that no emission of seminal fluid ever occurs without some sensation. You will find, however, that it is impossible to convince the patient that he is labouring under a delusion, and I do not advise you to appear to be too positive on the subject. As Surgeons you are bound to tell the truth, and place the patient's case fairly and properly before him; and if he still remains unconvinced as to the true nature of his case, do not send him away, but tell him that you hope, nevertheless, by appropriate means, to be able to remedy the condition under which he labours. I always make a point under these circumstances to prescribe some mild tonic with a few grains of soda and ammonia, and I generally pass a fair sized catheter, first to prove that there is no stricture, and next because it acts as a gentle stimulus to the urethra, perhaps causing slight pain and the flow of a few drops of blood, which may divert the patient's attention from an imaginary evil to a real fact. I have found that in a very large number of these cases there is really nothing whatever unusual, and that the disease is altogether imaginary; while in a very few the whole malady, if so it can be called, consists in the escape of a small quantity of a slight glairy secretion, possibly mere mucus from the urethra, or it may be a little fluid squeezed by forcing at stool from the prostate gland; any of the true vesicular secretion is comparatively rarely met with. I recommend you, however, not wholly to repudiate the case; convince him of his error, if you can, but do not dismiss him as if you wholly disbelieved his statements, for he will still cling with obstinate tenacity to his own ideas, and will think that you are too ignorant to understand his case.

Now these are also just the cases for the quacks; and such cases are of constant occurrence; I could enumerate many such.

I now call your attention to another condition frequently associated with the former, but frequently existing as a positive disease independent of it. I mean true spermatorrhœa, and nocturnal seminal emissions. I name them separately, although the latter is comprehended in the former term. But I have some doubt whether spermatorrhœa does often take place at any other time except during the night, and under the influence of, or accompanied by a dream. It, however, may happen under particular states of excitement at any time, and as a consequence of one of two conditions; that is, it may arise from trifling excitement, where great debility of the organs of generation has resulted from masturbation; or in cases of excessive over-excitement in a vigorous state of the parts. The remedy in both cases is simple enough, namely, abstinence from those causes which lead to the condition under consideration; in other words avoidance of all excitement of the generative organs. The former is often referred to irritation of the prostate gland, and that part of the urethra where the seminal ducts terminate, namely, the prostatic

sinus; and hence the employment of caustic to the part frequently affords effectual and permanent relief. This plan, coupled with the use of tonics and all means calculated to invigorate the system, is frequently all that is requisite for its cure. Nocturnal emissions are far more common. They are the cause of serious annoyance; and if they frequently recur, produce effects most debilitating to the patient. It is not my intention to go into all the symptoms resulting from this unfortunate state of things, but I must warn you not to attach too much importance to the occasional discharge of seminal fluid at night. Unless it often recurs, we may rather regard it as a relief to the system, than as constituting a very serious affection. Still, when once the mind of a patient is directed to it, it becomes to him a source of extreme annoyance, and he rushes blindly at once to those whom he supposes are capable of affording him immediate assistance. You must remember what I said before, that no diseases possess so powerful an influence on the mind as those connected with the organs of generation; and this need not on reflection excite our surprise, when we consider the universal sympathy between these parts and the body, as well as the mind, even in health.

Let me explain to you what I conceive to be the *rationale* of this condition. Nocturnal emissions occur almost invariably under the influence of a dream, and, as far as I can ascertain from the history of patients, are always accompanied by a sensation pleasurable or otherwise. I believe they never occur without exciting or being accompanied by some sensation. My inquiries also lead me to the conclusion that they generally occur just at the termination of the first natural sleep, and usually in the early part of the morning. They are, therefore, matutinal rather than nocturnal emissions. This is rather an essential point to understand, as you will see in the sequel. It is difficult to say whether they occur as the consequence of a dream, or whether they are of themselves the cause of the dream. My opinion is that in this regard they vary. I cannot go into a lengthened discussion as to the true nature of dreams. I believe that dreams frequently originate in the mind in imperfect sleep as a consequence of the powerful influence upon the mind of some passed event; and every one knows that dreams are readily excited by some physical impression: thus schoolboys excite to micturition by placing the hands of their schoolfellows in cold water during sleep. Now in the case of seminal emissions, at least such as occur night after night, or morning after morning, I think it is the mental impression which excites the dream, and the emission is the consequence. The patient is always thinking of his condition; it haunts him day and night; he gets a habit of thinking of his state, and hence in a weakened state of parts the habit of secretion and emission is also attained. That dreams are also excited by an overcharged state of parts must be evident at once, and such dreams are also accompanied by seminal emissions. I need scarcely allude to the natural mode of relief in such cases. But even these cases admit of considerable melioration by suitable means. The phenomena of dreams constitute a most interesting department of psychology. I shall not enter into the subject here; it is admirably treated by the late Dr. Abercrombie, and has also been particularly elucidated by Lord Brougham in his Discourse on Natural Theology. In reference to our own subject, however, I may be permitted to allude to a well-attested phenomenon connected with dreams; I mean, the rapidity with which, as Lord Brougham expresses it, a long succession of images passes through the mind with perfect distinctness and liveliness. In a dream, which occupies only an instant of time, a series of ideas relating to many events will frequently pass before us. The proof on which this assertion rests illustrates at the same time the fact that dreams generally happen just at the termination of sleep, and whilst, it may be said, we are half asleep and half awake.

I am certain that this is the case with dreams attended by seminal emissions; and it is a belief in the correctness of this assertion that has led me in a very many instances to recommend a simple procedure, which often alone effectually puts a stop to those discharges. I could enumerate many cases, in which, by simply directing a patient to rise early in the morning, and immediately after his first sleep, a discharge, to which he has been accustomed for many days and weeks in succession, has been wholly put a stop to, and has not recurred. I believe that the first sleep is always the soundest; and, if this be so, the mind may best rest as well as the body,

and no dreams occur; but, if the patient indulges in a second sleep, the mind wanders, dreams take place, and that impression which weighs heaviest on the mind gives rise to its own peculiar train of ideas, and hence emissions, etc. Surely this is no difficult remedy to pursue; it only requires a little resolution. It is conducive to health both of body and mind; and, if it thus breaks a chain of association, attended with such unpleasant results, it certainly is well worth our deep consideration and trial. Indeed, I find no difficulty in getting patients to put it to the test, but after a time they frequently lapse into their old indolent habit, and are again annoyed by emissions, which however seldom recur with their wonted frequency, and sometimes wholly cease.

You must remember, however, that while you are submitting your patient to this moral regimen, as I may call it, it is desirable, for various reasons, to pursue some medical treatment, and I advise that you should pass a moderate-sized catheter twice or thrice weekly, and give a little conium at night, and a few grains of carbonate of soda, in any vehicle you please, say infusion of gentian, two or three times a-day. I also generally advise a cold hip-bath night and morning. This may be regarded as a very essential part of the treatment, and I have often found it successful when used alone.

I should be sorry to assert that this method of treatment will invariably answer. It certainly will not, but you will be surprised at its success in very many instances, and is therefore well worthy of a trial. If it fails, no harm results; but I think it will not fail, for the remedy or means now recommended are generally attended by an improvement in the general health, and are, therefore, most likely to result in the relief of a local disease; and surely this affection may be ranked in this category.

If the plan does not succeed, recourse may be had to the use of the nitrate of silver, which, concealed in a canula, is to be applied to the *veru-montanum*, with a view to allay the irritability of that part of the urethra where the seminal duct end; for you all know that irritation of the orifices of ducts will always lead to a flow of the peculiar secretion of the gland to which the duct belongs; a fact you may easily illustrate by touching with your tongue Steno's duct, by which a flow of saliva is at once excited. But I am bound also to tell you that the simple plan I have developed to you has in very many instances succeeded where the use of the caustic has wholly failed; and further, I must say that the caustic treatment is not wholly without risk, as I have known severe stricture to have resulted from its improper and indiscriminate use.

The subject I have just considered is not a pleasant one by any means. It is usually consigned to the empyric; thoroughbred Surgeons do not like to meddle with it. It is only for this reason I venture to submit my observations to you, and I am quite certain that attention to the circumstances I mention will amply reward your pains. You may be the means of affording relief in many cases of unusual difficulty, and you will be able thus to give satisfactory relief to the minds of those who really require very great commiseration. I do not enter into the subject very fully; I am only anxious to introduce it as an appendage to the few remarks I have made on the prostate gland, as no doubt the disease in question is most intimately associated with the prostatic part of the urethra.

ORIGINAL COMMUNICATIONS.

ON THE FORMS OF REMITTENT FEVER PREVALENT IN THE METROPOLIS.

By THOMAS B. PEACOCK, M.D.

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(Continued from page 311.)

Diagnosis.—There can, I conceive, be no hesitation in regarding the form of fever of which the cases related in a former number of the Journal afford examples, as essentially distinct from typhus.

1. Typhus fever is often distinctly traceable to contagion, or may be inferred to have so originated. It usually commences with symptoms which are sufficiently characteristic, but not very severe. An eruption makes its appearance on the skin from the fourth to the seventh day, follows a tolerably regular course, and disappears from the twelfth to the twentieth day. The fever advances with the progress of the eruption, relaxes as it fades, and convalescence usually follows its disappearance in a few days. The predominant symptoms throughout the course of the disease are those of prostration of power, and oppression of the nervous system, and the condition of the patient does not very materially change from day to day, or at different periods of the day. When death ensues, it is usually the result of exhaustion, or of inflammation of the cerebral or pulmonary organs; and where convalescence occurs, it advances very gradually, and the attack is not liable to be prolonged by relapses.

In all these respects typhus fever differs from remittent:—the accession of remittent fever is usually more violent, and the progress more rapid. There is no eruption on the skin, except towards the later periods, when purpurous spots may occur, or after the exacerbations, when miliary eruptions or sudamina occasionally appear. Except during the exacerbations and for a short period, the skin is not dry, the tongue not dry and brown, the pulse is not very quick, and the mind remains clear. The prostration of strength is less persistent, and there is little tendency to sloughing or excoriation of the dependent parts. There are marked changes in the condition of the patient at different periods of the day, or on different days, and a peculiar aspect very different from that of a patient labouring under typhus. There is greater tendency to hæmorrhages from the mucous membrane, rheumatic symptoms, vomiting, jaundice, and diarrhœa; and lastly, while the relaxation of the fever ensues rapidly, and apparent recovery takes place at an early period, there are often one or more relapses, by which the duration of the attack is prolonged.

2. From typhoid the distinction of the remittent fevers is, at first sight, less obvious. The two diseases bear, indeed, considerable resemblance in the tendency to hæmorrhage from the mucous membranes, in the frequency of diarrhœa and jaundice, and in the occurrence of relapses with profuse perspirations; but, when more closely viewed, they present very distinctive features.

The mode of accession in typhoid is generally gradual, the patients being usually indisposed for some time before the appearance of serious symptoms; diarrhœa is generally present in a more or less marked degree from an early period, and continues throughout the attacks; the tongue is usually dryish, or dry, with a brown coating above, and morbidly red towards the tip and edges; the pulse is quick; there is much torpor and oppression of mind, and gradually advancing and long-continued prostration of strength. An eruption of a peculiar form is usually observed on the skin at some period of the disease. The patient does not present marked changes at different times of the day or on different days. The attack is often very prolonged, and convalescence is very gradual. Remittent fever, on the contrary, attacks suddenly, is rapid in its progress, displays frequent exacerbations and remissions; and is unattended by any eruption on the skin. The eruption in typhoid is less constant than in typhus; it yet appears in a sufficiently large proportion of cases to make it of diagnostic value. Thus, it was present in all but 16 out of 66 cases under my own care, the notes of which I have analysed. Its entire absence, therefore, in remittent fever is a marked distinction between the two affections. Sudamina are, probably, about equally common in the two forms of fever. I have noticed them as having appeared in 22 out of 52 cases of typhoid, and in 4 out of 9 cases of remittent fever. These states possess, however, in neither affection any material diagnostic importance. They are found in other forms of febrile disease, in which, after a dry state of the skin, there is a tendency to perspiration; they are more common in hot weather, and when the patient is too warmly clad and covered, than under other circumstances; and they appear to depend upon the obstruction of the ducts of the sudoriporous glands by dry cuticle. The ordinary purpurous spots, which are comparatively rare in typhoid, are not uncommon in remittent fever.

In the frequency of relapses typhoid and remittent fevers

are closely assimilated, while both differ in the same respect from typhus. Taking a series of years together, I find that relapses of greater or less severity are reported to have occurred in 1 in every 6 of the severe cases of typhoid, or in 6 out of 35 cases which I have treated at St. Thomas's, during the last three or four years. Their frequency varies greatly at different periods and seasons. Thus, they are most frequent during the early autumn, and they were especially common in that season of the year 1855; they also will probably be found to vary in frequency in different localities. The tendency to relapse in typhoid is, however, I conceive, an accidental complication, dependent, amongst other causes, on the influence of malaria to which the patients may have been exposed as well as to the poison of typhoid; in the same way as rheumatic or neuralgic affections may assume an intermittent or remittent character from the same cause, or as cholera may supervene during the progress of typhoid. In remittent fever, on the contrary, the exacerbations and remissions are essential features of the disease. It is noticed by Dr. Grant, as a distinction between the continued fevers having a more or less remittent type and the remitting fevers, that the remissions in the former take place about eight o'clock in the morning, and continue till about three in the afternoon; whereas, in the true remitting fevers, the remissions and exacerbations occur at irregular periods, and sometimes twice or oftener during the day. The aspect of a patient labouring under typhoid is also different from that of a person suffering from remittent fever, though this distinction is less marked than between both these forms of fever and typhus.

3. Remittent fever and relapsing fever are still more closely assimilated. Were I, indeed, to form an opinion, from the few cases of relapsing fever which I have seen in London, I should certainly doubt their specific distinctness. The two diseases so closely correspond, that in looking over reports of cases treated some time ago, it becomes extremely difficult to decide to which form they are to be assigned. In the epidemic of relapsing fever, as it prevailed when I saw it in Scotland in 1843, and as it has been described by various observers, the disease seemed, however, to depend upon a specific cause, different from those to which typhus, typhoid, or the ordinary remittent and intermittent fevers owe their origin. Thus, it frequently attacked various members of families in succession, and it infected the medical attendants, nurses, and other officers in the hospitals. It also prevailed epidemically in districts remarkably free from malarious influence. Thus Edinburgh occupies a situation peculiarly free from the sources of malaria. The surface is rocky, consisting of limestone, sandstone and trap; the soil is shallow; the site is freely exposed to various winds, especially to those blowing from the sea; the fall of rain is small, and there is but little foliage. We also find that remittent and intermittent fevers are at the present time almost unknown there. Thus from the statistical report of the cases treated at the Royal Infirmary from Oct. 1841 to same date of the following year, it appears that only two cases of ague occurred out of a total of 3530 cases treated, and both of them, if my memory does not deceive me, were in strangers. In the remainder of 1842 and the first six months of 1843, three patients were treated for ague out of 2840 cases, and of these one only resided in either Edinburgh or Leith. Thus of 6370 patients, five only had ague, and probably only one of these contracted the disease in or near Edinburgh. During the succeeding fifteen months, which embraced the period of prevalence of relapsing fever, three cases of ague only were treated out of 7204 cases. So that Edinburgh, though the relapsing fever there assumed its most characteristic form and prevailed most extensively, is a situation in which it would have been the least likely to appear did the disease depend only on a modification of the ordinary causes of intermittent and remittent fevers. We may therefore infer that the two forms of fever are specifically distinct. The cases of relapsing fever bear, however, a very close resemblance to some of the forms of remittent fever, and it is not easy to point out their distinguishing features. Both are characterized by their sudden accession, short course, rapid convalescence, and tendency to relapse and to be complicated with rheumatism, jaundice, and hæmorrhages. The primary attack of relapsing fever is, however, of a more continuous character, and does not present the frequent exacerbations and remissions which occur in remittent; and the relapses occur at more distant intervals, are of longer duration and less frequent. There is also a very close resemblance be-

tween the short febrile attacks to which the terms *ephemera*, *febricula*, and *diary fever* have been given by systematic writers, and short paroxysms of intermittent or remittent fever. The cases of *febricula* do not, however, appear to possess any specific character, but rather consist of imperfectly developed attacks of other forms of fever, and they probably not unfrequently owe their origin to the influence of malaria.

The *treatment* pursued in this form of disease varied with the peculiar character of the individual cases. If the patients, when they first came under treatment, presented symptoms of active febrile disturbance, febrifuge medicines were prescribed—nitrate of potash, the acetate of ammonia, etc.; with, in some instances, small doses of the potassio-tartrate of antimony. In some cases perspiration was encouraged by packing the patient in a blanket wrung out of hot water. As the active symptoms gave place to depression of strength, or where the active febrile stage had subsided before the patient was seen, the chlorate of potash, generally with the muriatic acid, was given; and, when the prostration was still greater, bark, ammonia, wine, brandy, etc., were exhibited. When the periodic character of the disease became more apparent, quinine and bark were had recourse to in fuller doses; and when the nature of the disease was from the first apparent, these remedies were immediately employed. When there were evidences of active cerebral disease, or of pneumonia or bronchitis, leeches, cupping, or counter-irritants, and, in the latter cases, antimony, were used. The hepatic symptoms were treated by hydrarg. c. cretâ or calomel, in combination with opium or Dover's powder; the rheumatic pains, etc., by colchicum. Diarrhœa, dysentery, discharges of blood from the mucous membrane, and profuse sweating, were arrested by the employment of astringents—gallic, tannin, or sulphuric acids, acetate of lead, etc., with opium. Anodynes, opium, and morphia were exhibited to calm delirium and procure rest.

As a general rule, depletion or any depressing means was very ill borne, and, if pursued at the outset of the attacks, liberal support and stimulants were soon very freely required. The remedy upon which we chiefly rely in relieving all diseases of a periodic character—bark and its alkaloid, quinine—were employed, to a greater or less extent, in all the cases. The quinine was generally given in conjunction with decoction or tincture of bark, or both, and in doses varying from 2 to 6 grains, repeated three or four times a-day. In the mild and uncomplicated cases this treatment was generally soon successful, the paroxysms becoming slighter, and occurring less frequently, but in other instances the treatment was less efficacious.

In one case the quinine failed entirely to prevent or to defer the occurrence of the relapses, or to lessen their severity, though the patient had at one period taken it for six days continuously, and for the last two days to the extent of 12 grains daily, together with a considerable quantity of tincture of bark, and was then fully under the influence of the drug, as indicated by the peculiar nervous symptoms.

At another period of his illness, the same patient took 8, 6 and 15 grains of quinine, together with tincture and decoction of bark on three successive days, without any satisfactory results,—a paroxysm of great severity occurring on the third day. Subsequently the attacks were both deferred, and rendered less severe by the use of smaller doses, very frequently repeated. The case ultimately, however, proved fatal. I have not tried in any of the cases of remittent fever which I have treated, the use of the larger and frequently repeated doses of quinine, as recommended by Dr. Dundas. This treatment has been found useful in the endemic remittent fevers of hot climates, and would probably be beneficial in those which occur in this country; but, from the depression which is apt to follow the use of quinine in such doses, and the unpleasant nervous symptoms which it occasionally excites, its employment would require great care. In the case to which I have above referred, the use of quinine was certainly carried to the fullest extent compatible with safety, yet it failed to accomplish the desired effect. In the simple cases of remittent fever, moderate doses of quinine are sufficient; and in the severer and more complicated cases, the excessive depression of strength which follows the occurrence of the exacerbations and relapses, the great irritability of the stomach which often attends them, and the shortness of the interval, make it very difficult to get the required remedies taken, and would render great caution necessary in the use of large doses of quinine.

ON CHLORIDE OF AMYLE.

By JOHN SNOW, M.D.

THIS compound was first made by M. Cahours, but was afterwards described more particularly by M. Balard, in the *Annales de Chimie*, in 1844. It is made by distilling equal quantities of amylic alcohol, or purified fusel oil, and perchloride of phosphorus. It is a colourless liquid, with a slight alliaceous odour, lighter than water, and boiling at 215° Fahr.

I prepared some of this substance a few months ago, and made some experiments with it on guinea-pigs and mice, and also inhaled a drachm of it myself. I ascertained from the experiments on the animals that they require to absorb one-fifth as much of the vapour as the blood is capable of dissolving, in order to be rendered quite insensible. This is exactly the same relative quantity as requires to be absorbed in the case of amylene, and it is not improbable that all the members of the amyle series will be found to possess the same relative physiological strength; for I found that this was the case with several substances of the ethyle series with which I made experiments some years ago. About one part in twenty-eight of what the blood would dissolve was the proportion which required to be absorbed, in order to cause complete insensibility with the compounds of ethyle.

The volatility of chloride of amyle is so moderate that it yields only three cubic inches and three-quarters of vapour at 60° Fahr. to 100 cubic inches of air, even when fully saturated by it. Owing chiefly to this circumstance it causes insensibility, slowly and with difficulty, and its effects pass off slowly; therefore I have not thought of applying it in surgical operations, although the symptoms it induced were very favourable. I think, however, that it might be tried with benefit in neuralgia, and other medical cases, and, possibly, in midwifery; it would, at least, have this advantage, that it could not possibly cause a sudden accident. I have not yet, however, sought an opportunity of applying it. The drachm of it which I inhaled took me ten minutes to consume; it produced a feeling of numbness and drowsiness, which slowly passed off without ill effects.

I should, probably, not yet have brought the subject of chloride of amyle before the Profession, except for what I believe to be a mistake which has been made respecting it. Dr. Simpson brought a substance which he called chloride of amyle before a recent meeting of the Medico-Chirurgical Society of Edinburgh, as a new anæsthetic (a). He stated that it did not boil under 120° Fahr., and that it had anæsthetic properties equal to those of the hydride of amyle. Now the latter is a powerful anæsthetic, very closely resembling amylene; and from this circumstance, and the very wide difference between the boiling points of chloride of amyle and the liquid which Dr. Simpson exhibited, I feel convinced that the latter was not the real chloride of amyle, but some other compound, or mixture of compounds.

The hydride of amyle is so very difficult to separate from the amylene, which is produced at the same time, that it could probably not be procured in sufficient quantity to apply to the human subject. Moreover, as it boils at 86° Fahr., and would be gaseous in sultry weather and in tropical climates, it would be extremely inconvenient in practice. It is, however, desirable to ascertain the properties of as many volatile narcotic substances as possible.

Sackville-street, May 4, 1857.

TETANIC CONVULSIONS CONNECTED WITH ULCERATION OF THE STOMACH.

By E. W. WITTEN, Esq., M.R.C.S.

THE subject of the attack was a well-nourished, healthy-looking child, aged 9 months, born with talipes equinus of both feet; and, although an operation was performed to obviate the deformity fourteen days prior to the attack, I am inclined to believe, from the autopsy and history of the case, that the convulsions and tetanus were due to the irritation consequent on the ulcerative process taking place in the stomach rather than as the effect of the operation.

Great torpor, amounting almost to coma, for twenty-four

(a) See Edinburgh Medical Journal, May, 1857, p. 1044.

hours preceded a violent attack of vomiting and retching, which continued for four days, in spite of all the remedies which were employed to allay the great irritability of the stomach.

Acidi hydrocyanici e. aq. calcis, alterative doses of hyd. c. cretâ, gentle aperients, antacids, and occasional mustard poultices to the epigastrium, were all tried in vain. Milk, arrow-root, beef-tea, etc., were likewise rejected. Drowsiness and torpor followed and preceded convulsions; tetanus and well-marked opisthotonos, with clenched hands, lasting for about three days, with intervals of from two to three hours of perfect tranquillity, during which time small quantities of milk and water, thin arrow-root, and beef-tea were given and retained. General emaciation of the body increased daily, and the ultimate attacks of torpor, and convulsions with tetanus, continued until death from perforation ensued; during the last attacks of convulsions it was found necessary to introduce wool between the fingers and palm of the hand to prevent the nails penetrating the flesh.

I made an examination of the body thirty hours after death, and found the muscles of the jaws in a state of rigidity, the hands clenched, the head drawn back. The heart was small and contracted; the lungs healthy, but atrophied. The stomach was small, and contained about ʒij. of arrowroot, partially digested; there was a patch of ulceration near the pylorus, to the extent of a half-crown piece, extending through the mucous and muscular coats of that organ; at the fundus there was found a perforated spot, the size of a florin, with thin, ragged edges, and great vascularity surrounding it. Death had evidently taken place from collapse. The mesenteric glands were somewhat enlarged, but all the other viscera were healthy. An examination of the brain was not permitted. It is probable in this case that the ulceration taking place in the stomach was coincident with the tetanus, etc.; the former as the effect of imperfect nourishment, the latter consequent on the operation; but the length of time supervening between the operation and the spasmodic affection, and also the great torpor, and afterwards vomiting, preceding the attack, inclined me to believe that the tetanus could not but be attributed to the irritation from ulceration.

P.S.—I feel indebted to Mr. Barringer for his kindness in allowing me to watch this case.—E. W. W.

72, St. John-street-road, March 4, 1857.

OBSERVATIONS

ON THE

MEDICAL HISTORY OF THE EARLY KINGS OF ENGLAND.

By G. CHAPLIN CHILD, M.D.

(Continued from page 336.)

HISTORIANS have left us some account of another surgical operation performed about this time, and, by a singular coincidence, the patient was Richard's old enemy—the Duke of Austria. Robert of Gloucester, in his Life of Richard, mentions that "the duke fell from his horse and hurt his foot; whereupon his physician declared that if it was not immediately smitten off, he would die. But none would undertake the operation. The duke then took a sharp axe and ordered his chamberlain to strike it off, which he did in three strokes. By this hacking the duke was put to the most horrid tortures."

KING JOHN. 1199—1216.

I find but little recorded of the medical history of this king until we come to his last illness. In the course of his operations against the English Barons, John was at Lynn, in Norfolk, on the 10th of October, 1216, and resumed his march northwards on the 11th. The country in that direction is flat, and even now fenny; but in those days it was little else than a marshy waste. Capper, in his History of Lincoln, affirms that, in ancient times, Swinstead lay on the sea-shore, although it is now about eighteen miles distant. In the same work it is mentioned that not more than 100 years ago, the state of the country in wet weather was such that travellers going from Swinstead to Sleaford—King John's second day's journey—were obliged to take a guide with them to pilot them through the marshes. We can easily imagine, therefore, that the inhabitants of the country were then much

more exposed to the influence of malaria than is the case at the present day.

Such being the nature of the country inland, King John preferred to march by the sea-coast. Having arrived at the mouth of the Welland, which falls into the sea at Fossdyke Wash, the king passed over in safety "by means of a good guide;" but immediately afterwards—probably from some miscalculation as to the tide—had the vexation to see his army, baggage, and treasure lost among the quicksands. The king, depressed by his misfortune, struck inland towards the Abbey of Swinstead, a distance of about eighteen miles through the pestilential country just mentioned, where he arrived worn-out with fatigue and in great anxiety. Matthew Paris, Roger de Wendover, and others relate that fever now declared itself—*acutis correptus febris*;—Holinshed terms it *ague*. He then fed gluttonously on peaches, or pears, or peaches soaked in new wine, and drank new cider immoderately. The result was a fit of indigestion. No course could have been followed more calculated to aggravate the fever into a fatal attack. On the following day the king, although seriously ill, forced himself to continue his journey, as he knew well that, notwithstanding the sacred character of the place where he had taken shelter, he was in the hands of bitter enemies. On the second day, therefore, he travelled from Swinstead to Sleaford, either on horseback, or, as Holinshed says, "in a litter presentlie made of twigs, with a couch of straw under him," being "unable to ride on account of his sickness." Holinshed adds, that "he intended to have gone on to Lincoln, but the disease still so raged and grew upon him, that he was enforced to stay one night at the castle of Sleaford." On the third day he contrived with difficulty to reach Newark-on-Trent, a castle belonging to the Bishop of Lincoln, where he finally broke down, and rapidly sank after an illness of six days' duration, in the 49th year of his age. The chief Medical attendant of the king on this occasion was the Abbot of Croxton, of whom it is recorded that he was "*peritissimus medicinâ*."

There is some difference of opinion as to the nature of the beverage in which the king indulged to excess at Swinstead. It is for the most part rendered by "*cicer*." Ducange defines "*cicer*," or "*cicera*," or cider; also "*omnis potio quæ extra vinum inebriare potest*." That cider is meant in the present instance is most probable, for Matthew Westminster terms it "*pomarium*;" and it is likewise to be noticed that the event occurred in the month of October, when new cider might have been expected to appear on the board. Dr. Brady, a well-known historian of the 17th century, calls it "*new bracket*," a favourite beverage about Queen Elizabeth's time, made of mulled ale with honey and pepper. But this opinion rests upon no satisfactory evidence.

The cause of King John's death may, therefore, be considered as a violent fit of indigestion, followed by a combination of gastric and marsh fever. The reader may notice a considerable agreement between this illness and that which proved fatal to Henry I.

Some old writer, in making an addition to Hoveden says, that the king died of a bloody flux. In the continuation of Ingulph it is stated that John died of dysentery, and this is repeated by Knyghton. That there may have been some enteric complication of this kind in the course of the illness is not improbable.

The last illness of King John has been very differently described by modern authors. Hume writes somewhat vaguely:—"Affliction for this disaster, and vexation from the distracted state of his affairs, increased the sickness under which he then laboured—(the sickness not specified); and though he reached the castle of Newark, he was obliged to halt there, and his distemper soon afterwards put an end to his life." Merle d'Aubigné, in his History of the Reformation, settles it in the following rather off-hand manner:—"The king drank copiously of cider, and died of drunkenness and fright."

The old chroniclers have heaped up story upon story respecting the cause of the king's death, caught up from the whisperings of the day. Few ascribe the death to natural causes alone; many to poisoning. There is, however, no real ground for these accusations; and, if we now notice them, it is merely to illustrate the popular opinions then current in regard to poisoning. The king, evil-minded though he was, never, so far as is known, breathed a suspicion that this was

the case, nor did the numerous rumours on the subject ever lead to any legal inquiry.

It was mentioned that King John had been forced by circumstances to trust himself to the pious hospitality of the monks at Swinstead. Nevertheless, one of them, "recollecting how hardly the king had dealt with the church, and how he had been so marvellously delivered into their hands, went into the garden, where he found a most venomous toad, and so pricked him and pressed him with his pen-knife, that he made him vomit all the poison that was within him." (Grafton.) The poison was then mixed with some ale, "where-with he poisoned the king." The popular belief in the venomous nature of the toad thus appears to have existed long before Shakspeare; and it is a question which still gives rise to discussion in our own day. Cuvier's own opinion was that toads are not venomous, but his editors (*Règne Animal*) qualify this by saying, "There exudes from the skin of the back a white fetid humour, acrid, though not venomous;" "it also squirts a fluid from the anus, and attempts to bite." Dr. John Davy, also, maintained that they were poisonous; while Fothergill maintained they were innocent and useful. I have myself heard from good authority, although I do not absolutely vouch for its accuracy, that there is at least this ground for the popular belief, that a kind of acrid mucus is secreted by the skin of the animal, which, although it is innocuous as regards man, sometimes causes a bird seizing the toad instantly to let go its hold.

The only other rumour I shall notice is that mentioned by Gisburne and others, of the king having swallowed poison introduced into a dish of pears. The king suspected the presence of poison, we are told, "because such precious stones as he had about with him cast forth a certain sweat." This was another of those superstitious opinions which long prevailed.

THE LONDON

PRACTICE OF MEDICINE AND SURGERY

REPORT ON VILLOUS CANCER AND POLYPUS OF THE BLADDER.

(Concluded from page 434.)

GUY'S HOSPITAL.

Case 6.—DEATH FROM PROFUSE HÆMATURIA.— VILLOUS POLYPUS OF THE BLADDER.

(Under the care of Mr. COCK.)

Dr. Wilks has kindly furnished us with the following facts respecting a case which died in Guy's, in 1851. Unfortunately the detailed notes have been mislaid. The subject of it was an elderly man who had died from repeated and profuse hæmaturia. The duration of his symptoms is not known. At the autopsy (Nov. 7, 1851), all the organs excepting the bladder were found healthy. The bladder was full of coagulum, and at its base was a large shaggy tuft, consisting of two halves—one pedunculated, and the other not, altogether about the size of an egg. They were very vascular, and contained large loops of bloodvessels. The villous prolongations were in all parts covered with columnar epithelium. Dr. Wilks, who has carefully examined and compared this specimen, the one noticed below, and a third recently sent by Dr. Rees to the Guy's Museum (see below), states, that the last differs from the other two in wanting the columnar epithelium, and suggests that there are two forms of the disease. There can, we think, be little doubt of the correctness of this opinion. In Mr. Cock's case, and in that of Dr. Hooper's, the disease is the simple villous polypus, whilst Dr. Rees's is evidently a villous growth of cancer.

A case very similar to Mr. Cock's occurred, we are informed, in Guy's, about two years before, but we have not been able to obtain its particulars.

SURREY DISPENSARY.

Case 7.—FATAL HÆMATURIA IN AN OTHERWISE HEALTHY MAN.—VILLOUS POLYPI OF THE BLADDER.

(Under the care of Dr. HOOPER.)

A railway porter, aged 34, and until the present illness remarkably robust and strong, became a patient of Dr. Hooper's at the Dispensary on November 1, 1852, four days before his death. He stated that about four months ago, without any premonitory symptom, he had first observed blood in his water. It was unattended by pain or any other symptom. The bleeding continuing, he applied about a month later for medical advice, and subsequently was under care at Guy's Hospital. He described the quantity of blood which had been lost as very great indeed, and his appearance was excessively blanched and pale. He had not lost flesh, and retained a good appetite; had no pain anywhere, and excepting the hæmaturia there were no indications of visceral disease. To arrest the bleeding, turpentine, lead and steel had been used, but without effect. Dr. Hooper employed gallic acid, sulphuric acid and alum, but it was without avail, and the man sank from sheer bloodlessness on the 22nd.

At the autopsy every organ in the body was found healthy, with the exception of the bladder. Near the opening of the right ureter was a peculiar tufted growth, about the diameter of a sixpence, and one-eighth of an inch in depth or thickness, and in its vicinity were two or three much smaller, and more vascular looking tufts, but possessing the same general characters. The bladder contained about three ounces of dark coagula, its capacity was normal and its coats healthy. When the tufts were shaken out in cold water they spread out into a dense arborescent form, and under the microscope were seen to consist of beautiful arborescent tufts, which seemed to be made up of an immense number of capillaries covered with columnar narrowly elliptical epithelial cells with large nuclei. More detailed particulars of this case than we have been able to find space for may be found recorded by Dr. Hooper in the *Lancet* for Dec. 18, 1852. The case is one of much interest, as bearing out the opinion we have expressed as to this form of villous polypus being a purely local disease. As in all the other examples of it death resulted simply from the continued and profuse hæmorrhage.

NOTICES OF OTHER CASES, COMMENTS, ETC.

In venturing to employ the term "villous polypus," as we have done in the former parts of the Report, we ought, perhaps, to explain that it is not intended at all to deny the malignancy of certain growths which present a villous surface. In some examples of the disease, as it is met with in the bladder, there can be no doubt whatever as to its being of cancerous nature. Of this form a specimen recently added to Guy's Hospital Museum by Dr. Rees offers a good instance. In it the tumour has a large base of solid structure, and infiltrates the coats of the bladder. The fungous mass projects into the cavity of the bladder, to a size of perhaps nearly that of a walnut, and is covered with shaggy prolongations. By its side are one or two small tufts of villous growth, with little if any solid basis structure; but in another part of the bladder is a thick, flattened mass of deposit, the size of a penny-piece, evidently consisting of medullary cancer, and which has no villi on its surface. This case evidently forms a link of connexion between fungating soft cancer of the bladder and the simple villous polypus. Perhaps, too, in asserting that we have not sufficient evidence for believing that the latter is a malignant affection, we ought to admit that there are facts which tend to show that the existence of villi on the surface of a polypus is, *pro tanto*, a condition which ought to induce suspicion. The most important evidence on this head is that supplied by Rokitsky.

We may proceed now to mention some other instances of this disease. The Museum of Guy's Hospital, although it contains several examples of medullary cancer of the bladder in which the tumours project into the viscus, and have a more or less shaggy exterior, has none of the simple villous polypus. Dr. Wilks has, however, mentioned to us two cases which occurred in its wards, and which we have noticed above.

In the Museum of the Royal College of Surgeons, Prepara-

tion 2005 affords a beautiful example of this disease in its uncomplicated form. The villi are very large and shaggy. The particulars of the case are recorded in Sir E. Home's work on the Diseases of the Prostate Gland, p. 49, vol. ii., and are briefly as follows:—A painter, aged 63, feeble, and for sixteen years the subject of lead palsy, suffered also from urinary symptoms. "He had a constant desire to make water, voiding it every half-hour. In coming away it had the appearance of fluid blood, and when allowed to stand the whole mass formed one uniform coagulum, unattended by any other symptoms, so that it was difficult to guess at the cause. After it went off, he made water only at the intervals of six hours." About six months from the time that he had first come under Sir Everard's care he sank under an attack of low fever, having been gradually losing strength. No other disease, excepting two cysts in one kidney, and the villous polypi in the bladder, are noted in the account of the autopsy. The bladder contained much coagulum, and near the orifice of the right ureter was "a fungous fibrous excrescence." The growth so denominated is a tuft of villous cancer the size of half an egg, and pedunculated. Near to it is a much smaller growth of similar nature. These are described as having been very florid when in a recent state. This preparation is figured in Sir E. Home's book, and it also furnishes the illustration of villous cancer which Mr. Paget gives, and is again portrayed in Mr. Coulson's work on Diseases of the Bladder. It is, indeed, a typical example of the so-called villous cancer, and, next to that afforded by Case No. 2, is the best that we have ever seen.

Preparation 2006 in the College Museum is one of two pedunculated growths of the bladder, the surfaces of which are villous. They are about the size of marbles, and situated between the openings of the ureters. The patient, who was a clergyman, had been under Hunter's care for about a year before death, and had suffered from hæmaturia and retention of urine. The first bleeding had occurred not less than sixteen years before death. No other disease was discovered in the body.

Sir B. Brodie writes (1st ed., page 92), "In Dr. W. Hunter's Museum there is a preparation of a bladder, the inner membrane of which is in several parts elongated into laminae or processes, each about one quarter of an inch in length. I have seen one case in which a fungus projected into the cavity of the bladder, having somewhat of a fibrous structure, and a good deal resembling in appearance the vessels of the placenta unravelled." There can be little doubt that these are examples of the villous polypus, and it is to be regretted that more particulars have not been given. The history of the symptoms, etc., in the last would be of much interest and value.

The College Museum contains, in addition to those mentioned, several specimens both of malignant growths in the bladder possessing a more or less villous exterior, and of large fibrous polypi, the exterior of which present subdivisions into small lobules, though not so minute as to merit the name of villi. The latter form of polypus seems to be most common in children, and Case 4 of last week's Report offers a good illustration of it. In one such the late Mr. Crosse, of Norwich, operated, expecting to find a stone, and removed several polypoid growths, though not nearly all that were present. The patient, a boy of two years old, died on the following day. Almost all the preparations we have seen show numerous distinct growths, many of which are so flattened as to preclude all hope of removal by operation.

We may conveniently consider together the questions of

SYMPTOMS AND TREATMENT.

In determining upon any specific plan of treatment all will depend upon the right interpretation having been made of the symptoms. The long continuance or frequent recurrence of hæmaturia, without any discoverable cause, is in itself a symptom which ought to lead to a suspicion of some growth in the bladder. If, while it appears certain that there is no calculus present, and the age or sex of the patient precludes the idea of an enlarged prostate, there is added to hæmaturia occasional retention of urine, the signs of a polypus are complete. The proposal to operate as if for lithotomy, and to remove the growth with curved scissors, has been boldly made by Mr. Gross, of New York, but considering the confessedly uncertain nature of the diagnosis even in the clearest cases, we presume that few surgeons would be found who would dare to undertake so dangerous a procedure. Still, should another instance present

itself with symptoms as suspicious as those in the case which furnished preparation No. 2006 in the College Museum, and with sufferings as intolerable as they are described to have been, the Surgeon, with the advantages which we now possess in chloroform, would certainly be justified in resorting to it. Mr. Coulson writes, "Unless some fortunate accident should render the diagnosis clear, the prudent Surgeon will abstain from all operative proceedings in cases of this kind." This remark must of course be considered as applying only to the disease in the male. With the female bladder, the risk is wholly different. It is so easily accessible that all doubt as to diagnosis might be removed before adopting any operative procedures, and those procedures themselves would, when resorted to, be comparatively simple, and devoid of risk. By making side incisions in the urethra, (such as those described and illustrated by a diagram in Mr. Hilton's case of stone in the female bladder, at page 111, for July 29, 1854,) ample room might be obtained for either the application of a ligature to the polypus, or its removal with curved scissors. The former expedient would probably be the safer and the more likely to be effectual. The risk to life would be very small, and it would be well worth encountering that of subsequent incontinence of urine. The circumstance that these growths are usually situated in the front part of the bladder, and that they are generally pedunculated, and have quite a narrow base of attachment, offers much encouragement to an attempt at removal. As to whether or not the true villous polypus will return after removal, there exist as yet no facts, since it has, we believe, never been tried. The circumstances in its history to which we have adverted above certainly make such a trial seem well worthy the consideration of the Surgeon.

JONATHAN HUTCHINSON.

KING'S COLLEGE HOSPITAL.

DOUBLE POPLITEAL ANEURISM—COMPRESSION TREATMENT FOR FIVE MONTHS—LIGATURE OF BOTH FEMORAL ARTERIES.

(Under the care of Mr. BOWMAN.)

A case of double popliteal aneurism, which is now under Mr. Bowman's treatment, is of great interest in reference to the modern plan of treatment by compression. A case was published in our reports some time ago (see *Medical Times and Gazette*, November, 1853, p. 479) in which, after ligature of the femoral subsequent to a patient trial of compression, pulsation returned in the tumour, and remained permanently. This occurrence led us to remark upon the evidence it gave of the efficiency of the compression plan in opening up the collateral channels, even where it did not cure the aneurism, thus proving it to be a very valuable preliminary means to ligature, as tending to obviate the risk of gangrene. It was evident that here the collateral channels had become during the long trial of compression sufficiently large to supply the sac with a good current of blood. Mr. Curling's case, to which we allude, left the Hospital with the tumour pulsating almost as forcibly as ever, though its walls had been much thickened by deposit and its size was greatly diminished. Mr. Curling has since informed us that the man has been able to go about his work, and that the tumour has not troubled him sufficiently to induce him to apply for further surgical assistance. Setting aside several instances in which the tumour has pulsated feebly for a few hours or it may be days immediately after the ligature, and then finally solidified, we are not aware that this awkward consequence of prolonged compression treatment had been met with in any other example. In the case now under Mr. Bowman's care the pulsation has remained so long as to become a source of some anxiety, although, as it is progressively becoming more feeble, there is yet fair reason to expect that it may cease. The following is a brief history of the case:—The patient is a man of nearly 30, who was admitted about six months ago on account of an aneurism in the left popliteal space. In the course of an examination of his arteries a second aneurism was found in the right ham, of which he had not previously been aware. The one on the left side was much the larger of the two, being perhaps about the size of half an orange. The man was in fair health, of patient temper, and intelligent.

Mr. Bowman determined to attempt a cure by compression, and accordingly the necessary instruments were adapted to both thighs, the treatment of the two being conducted simul-

taneously. For nearly twenty weeks a system of interrupted compression was most patiently pursued, the interruptions being as short as practicable. In the hands of Mr. Way, the House-Surgeon, all the details of the plan were most carefully attended to; and at one period, when it was suspected that some loss was sustained by the slipping of the compressors during sleep, Mr. Bowman's dressers volunteered to sit up during the night to attend to them. At first, the progress made by the left tumour was satisfactory; it diminished considerably in size, and became harder, but about a month before the ligature was applied it began to increase again, and continued afterwards to do so steadily though slowly. The tumour in the right ham increased in size throughout the treatment, but did not attain any very large bulk. Things being in this unpromising position, Mr. Bowman determined to resort to the ligature. It should be observed, that apart from a certain amount of increase of the right aneurism, the man did not appear to have lost anything by the trial of compression. He was still in good health, and the left aneurism was both smaller and more solid than at the time of admission.

On April 11 a ligature was placed on the left superficial femoral, at the usual place. The operation was performed very quickly, and without the least unnecessary disturbance of parts. All pulsation ceased in the tumour on tightening the ligature. In the evening, however, a feeble pulsation had returned, and on the following day it was more vigorous.

On May 2 the man was brought into the operating theatre, and a ligature applied to the right femoral. Mr. Bowman stated in his remarks after the operation, that all had done well as regards the former operation, the ligature had come away safely, and the wound was healing. Pulsation, however, still remained in the tumour, but, as it was becoming more feeble, he had little doubt but that it would eventually stop. The tumour was considerably smaller than before the operation.

May 5.—The case is progressing well since the last operation, but a feeble pulsation has returned in the right tumour also, that in the left still remaining.

We shall advert to this case again at a future time. As an example of symmetrical disease of the arterial system, and its occurrence at a comparatively early period of life, it is of much interest. As previously remarked, the return of pulsation for a short time after ligature of the main vessel is not infrequent. Mr. Bowman states, that he has known more than one instance in which it persisted for several weeks, and then ceased, and although the experience of the writer does not furnish a similar example, yet there is with such a fact every reason to be hopeful of the final result.

HOSPITAL NOTES.

REMOVAL OF PART OF THE IRIS IN CASES OF GLAUCOMA.

Mr. Bowman has recently tried in two cases of glaucoma the effect of an operation recommended by Græfe, of Berlin, which consists in removing a considerable portion of the iris. We are not aware of any published report by Græfe, either of the mode or of the theory of his procedure, and the account of it has been brought to England by German visitors to the Moorfields Hospital. Considering that in a condition so hopeless anything recommended by so high an authority, however deficient in support from previous knowledge, deserved a trial. Mr. Bowman determined to adopt it in a few selected cases. The two in which it has been pursued were both good examples of the condition formerly known as glaucoma, and in each only a mere perception of light remained; both were men, one aged about 50, the other about 40. The operation performed consisted in entering the sclerotic on the outer side of the eye, close to the corneal margin, with the point of a cataract knife. The incision made was about a quarter of an inch in length. The knife was directed so as to enter the anterior chamber with its flat surface parallel to the iris. A portion of iris having been allowed to bulge was seized by the forceps and cut away. No appreciable irritation followed in either case. The line of incision quickly healed, and the iris was left deficient for an extent of perhaps a quarter of an inch on its outer side, the size of the pupil being proportionably increased. In each instance the patients aver

that their sight is to a certain extent improved, and that they can discern objects which before they could not perceive. We shall return to this subject, and give the details of the cases at some future time.

FRACTURE OF THE NECK OF THE FEMUR MISTAKEN FOR PARALYSIS.

A case, well illustrating the necessity of surgical knowledge on the part of the physician, occurred in Dr. Johnson's practice at King's College, the other day. An old decrepit woman was admitted, with the account that she had been paralyzed in her right side for three weeks. She had a large bed-sore on the back from pressure, having been confined to bed since the commencement of her illness. On questioning, Dr. Johnson found that the paralysis affected the lower extremity only, and that even in it sensation was not interfered with. On uncovering the thighs, he noticed a degree of deformity about the right hip, and that the foot was somewhat everted. On further examination it proved that, on the morning on which the so-called paralysis occurred, she had fallen and struck her hip. The case, indeed, turned out to be in reality one of the fracture of the neck of the femur, which had, prior to her admission, been mistaken for one of hemiplegia. Mr. Fergusson afterwards saw the case, to whose treatment the patient was transferred.

NOTES AND QUERIES.

We that questioneth much shall learn much.—*Bacon.*

ANSWERS.

No. 205.—SERJEANT-SURGEONS.

Perhaps your correspondent C. H., in "Notes and Queries" of last week, will find the following names of some of the Serjeant-Surgeons acceptable:—

William Hobbys, the first Serjeant-Surgeon, 1461.
Richard Wiseman, Serjeant-Surgeon to Charles II.
Richard Ferris, to Queen Elizabeth.
William Clowes, to Charles I.
Charles Bernard, to Queen Anne.
Sir Caesar Hawkins, Bart., to George III.
Ambrose Dickens, to Queen Anne.
Sir Everard Home, Bart., to George III.
Sir David Dundas, Bart., to George III.
Sir A. Cooper, Bart., to William IV. and Queen Victoria.
Sir B. C. Brodie, Bart., to Queen Victoria.
Robert Keate, to Queen Victoria.

I am, &c.

H. L. MAYSMOR.

Regent's-park, May 4, 1857.

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ROYAL INSTITUTION OF GREAT BRITAIN.—At the general Monthly Meeting, Monday, May 4, 1857, William Bowman, Esq., and Major Lewis Burroughs, were admitted Members of the Institution. The following Professors were unanimously re-elected:—William Thomas Brande, Esq. D.C.L., F.R.S., L. and E., as Honorary Professor of Chemistry; and John Tyndall, Esq., Ph.D., F.R.S., as Professor of Natural Philosophy in the Royal Institution.

WESTMINSTER HOSPITAL.—Dr. Radeliffe has been appointed Physician, and Dr. J. Russell Reynolds, Assistant-Physician to this Hospital.

The son of Sir Philip Crampton, of Dublin, has recently been made a K.C.B., and appointed British Ambassador to the Court of Hanover.

Medical Times & Gazette.

SATURDAY, MAY 9.

POPULATION, FOOD, AND CONJUGAL MORALITY IN FRANCE.

SOME weeks ago we noticed the fact that while the population of Great Britain has been gradually and rapidly increasing for many years past, there has been a progressive decline in the population of France. We gave various hypotheses on which the fact might be accounted for—among others the increase of urban and the decrease of rural population—the war, cholera, emigration, and certain conjugal habits which are understood to have spread very much in France. The subject is of such grave importance that we now feel bound to discuss it more fully. In doing this we propose to show, in the first place, the actual number of the population according to the last Census, and then to inquire how far the extraordinary decline of population in France can be explained by the food and by the conjugal relations of the people.

There has been a progressive decline in the ordinary rate of increase of the population of France since 1841, as may be shown by the following statement:—

From 1841 to 1846	the increase amounted to	1,200,000
„ 1846 to 1851	„ „	380,000
„ 1851 to 1856	„ „	256,000

In the 27 years from 1817 to 1852 the mean annual increase of the population of France was not more than 155,929—yet in the 5 years 1846 to 1851 it had fallen to 76,000 yearly—and from 1851 to 1856 it was only 51,200 yearly,—and this in a population ranging in that period from 29 to 34 millions.

The population of England and Wales in round numbers is about half that of France, yet, in the 5 years 1851—56, in which the French population only increased by 256,000, the returns of our Registrar-General would show that we have increased about 1,157,000—so that the relative increase of our population during the same five years is *nine times* greater than that of France.

The important question now arises whether the food of the two nations may not help to explain the different tendency of their populations. The financial state of our neighbour is remarkable. Enormous sums have been spent by the State and by municipalities in town improvements since the late revolution. There has been a universal increase in the consumption of articles of mere luxury. The rural population has migrated in great numbers to the large cities. Without going into tedious statistical details we may state, as a good example of this migration, that in Paris the increase in the last five years amounts to 300,000, and there has been an increase in other great cities; but, as the population of the whole country has been almost stationary, it is quite clear that the gain of the cities is the loss of the rural districts; and as it is the adult working population who leave the country to seek town employment, the loss of adult labour in the agricultural districts is far greater than is shown by the numerical diminution of the entire rural population.

Hence diminished production in the country, with higher rents and increased consumption in the towns. Hence a great rise in prices, met by police restrictions. The butcher must obey the police, but he must live—so, as he cannot afford to kill fine animals, he meets the fixed price by a supply of lean mutton and cow beef. Inundations have occurred and the harvest has been defective, yet the baker must sell his loaf at the fixed price. He must also live, and he sells bread of inferior quality. The grapes suffered from disease, and wine

trebled in price. The people could not afford to buy good wine at modern prices, and had to content themselves either with bad wine or Dutch spirits. Whether these causes have been long enough in operation to affect the proportion of births and deaths materially may be questioned, but all physiological knowledge certainly tends to show the probability of some such relationship. While, on the one hand, we know that throughout the animal kingdom the surest way of making the female sterile is to overfeed her and surround her with luxury, and that the most fecund females are those whose existence is most precarious; we know, also, a certain amount of the necessaries and comforts of life to be necessary for the procreation of *healthy* offspring, of children likely to exist after the period of infancy, and add to the population of their country. Thus, the beer, and beef, and fat mutton, the beans and bacon, the wheaten bread, even the oatmeal porridge and the milk and potatoes of the masses of our English, Irish, and Scotch population, must be compared with the sparing use of meat by the poorer classes of the French, and the thin acid wine they drink, to say nothing of their *soup maigre*, made of "the end of a tallow candle in a quart of hot water, with a tablespoonful of oil and some slices of bread."

But the amount of solid nutriment taken by the middle and lower classes in England and France respectively, however it may modify the rate of increase of population in the two countries, is only one among a variety of causes assigned for the diminishing population of France; and we cannot pass over one of these causes, openly discussed by French physiologists, although it leads to a delicate question of social morality.

A clever writer in the *Spectator*, referring to the diminishing population of France, says the chief cause has long been notorious. "It was held up as an example in this country many years back, by a certain sect of the disciples of Mr. Malthus; and it is admitted in the *Edinburgh Review*, that the practical results of the virtue inculcated by these economists is attained in France. While the marriageable population of that gaily-disposed country does not hold itself in any degree bound to abstain from matrimony, it has been accepted as an absolute moral law, respected alike by prudential and imprudential, that the progeny of a marriage shall be limited to a number absolutely small, and such as the parents have pre-arranged the means of supporting in a given condition of life. The economists who recommended that rule of practical morals were wont to enforce it by the assurance that it would tend to place each married couple in a "position of greater material comfort; and such appears to be the case in France." It may be as well to give the words of the *Edinburgh Reviewer*. He says, "Whether the doctrines of Mr. Malthus are followed or not in that country, some such check as he contemplated seems powerfully to operate against the rapidity of increase, and the more the advantages of increasing wealth are felt and enjoyed, the less disposed are the French to meet the demands of numerous families."

M. Armand Husson, in his work "*Les Consommations de Paris*," published last year, has shown that the proportion of births both to the population and to marriages is certainly decreasing in Paris. He says, that in Paris, from 1817 to 1831, there was one birth to 26·87 inhabitants; but that from 1846 to 1851 there was only one birth to 31·98 inhabitants; and he gives returns which prove, that while the number of *marriages* increases, the number of *births* declines, proving, he contends, "a decrease in the fecundity of legitimate unions."

The very reverse is the case in England. In 1853, the marriages were 164,520; in 1854, they were 159,727; in 1855, they sank to 152,113; and in 1856, somewhat recovering, they rose to 159,183. In 1856, though the marriages were

fewer, the offspring was more numerous. In 1853, 612,391 children were born; in 1854, 634,405; in 1855, 635,043; while in 1856 the births had risen to 657,704.

M. Mayer, in the third edition of his work just published in Paris, "*Des Rapports Conjugaux, considérés sous le triple point de vue de la population, de la santé, et de la morale publique*," asserts as a fact of common observation, that it is the poor uneducated people who have the largest families, while the rich endeavour to restrict the number of their heirs as much as possible. He devotes two chapters to the Medical treatment of this subject, under the following titles:—

"1. What are the obstacles to excessive increase of population which are not contrary either to the laws of hygiene or to those of morality?"

"2. What are the dangers of artificial preventives of fecundation?"

We are not going to follow M. Mayer through his dissertation, either on the *moral restraint* which supplies the answer to his first question; or the proteiform nervous disorders in the male, or the uterine affections in the female, which he believes to be the result of the "generative act incompletely realised;" but when we find a physician of M. Mayer's position expatiating on these matters, gravely condemning certain *obstacles par artifices*, and explaining the modern doctrines founded upon the phenomena of ovulation, and stating the period after menstruation at which conception becomes impossible until the next menstrual period, we find a clue to the common observation of those who have lived much in France, that it is much more rare to meet with large families there than in England—we are almost compelled to believe (what we have been assured on good authority to be the fact) that it is becoming common to stipulate in marriage contracts that only a certain number of children shall be the result of the marriage; and we feel bound to admit as one probable cause of diminishing population in France, a habit which as men of science we cannot overlook, however strongly we may condemn it as disastrous to the nation, and contrary to the laws of morality and religion.

THE WEEK.

A Weekly Return upon the Rise and Decline of Disease has just been commenced by the general Board of Health. The Registrar-General's weekly return, as is well known, faithfully records the deaths of the metropolis, but the supplementary sheet, to which we now particularly allude, records not the *deaths* but the *diseases* of our enormous city and its environs. The remarks of Dr. Conway Evans, the compiler of the district returns, explain very clearly the objects held in view in the new publication. "A registered death," he observes, "is an accomplished fact. Prevention in the particular case is no longer possible. The record, often obscured in its bearing by many sources of fallacy, imperfectly represents, except to the most initiated, the multiple of sickness to which it corresponds. A single death by fever often means that in the court where it occurred there have been a dozen not fatal cases. A single case, as emphatically as a single death, might have warned the local authority against the danger, might have told that inmates of several houses were liable soon to be prostrated by the specific poison, soon to become patients of a Hospital, at the charge of the Union or the Charity, soon perhaps to leave widows and orphans. A single death by small-pox means that the most dreadful of infections is let loose among a population never more than partially protected, perhaps in the particular case utterly unprotected, against its ravages. Yet so great is the security given by vaccination, that if well-vaccinated persons happen to contract small-pox, there may be a hundred or two hundred cases (all equally infectious) without a death having appeared

in the register. So again with cholera: before the registration of a single death, there may for weeks have been scores of cases of diarrhœa. The death may be the beginning of a no longer repressible outbreak; the attacks might have invited almost unfailing measures of prevention." Thus it will be seen that the new return aims at giving, as far as possible, the state of disease existing in the metropolis; and to carry out this design, the Medical Officers of Health for the different districts collect the returns of sickness in their several localities, such information being derived from Hospitals, Dispensaries, Lunatic Asylums, and the in-door and out-door Medical cases in the Parishes and Unions. The results of private practice are not recorded; but practitioners are invited to furnish notices of any remarkable outbreaks of disease which may fall under their notice, and the publication of which may tend to the adoption of sanitary measures. In order to reduce the information thus collected into a systematic form, the cases of disease are first divided into districts; noting in each district, the height above high-water mark, the area in statute acres, the population, and the water-supply; then the cases are divided into Institutions, as Workhouses, Out-patients, General and Special Hospitals, Dispensaries and Infirmaries, Lunatic Asylums, Prisons, etc. Lastly, the diseases classified in consecutive columns. We are happy to give every publicity in our power to this very excellent feature of the growing sanitary knowledge of the present day: and we hope that the officers of all our public institutions, whether lay or Medical, will co-operate to render efficient the proposed weekly returns; for it is abundantly evident that in order to be useful, the publication must be complete, and this completeness can only be attained by the voluntary assistance of many fellow-labourers in the same cause.

Our readers will do well to glance at the case of Sweet *versus* Segar, related in the *Times* of May the 5th. It has been decided that tenants, if bound by the usual covenants of a lease, must execute, at their own cost and charges, such structural works, including the building of new drains, as may be ordered by the vestry of the parish, or other local authority, under the Metropolis Local Management Act. This is a great hardship, and a great injustice, but at present it seems to be the law.

We have published in previous numbers the names of several Medical Officers of the Army who have received the Legion of Honour or the Order of the Bath; and while no one supposes that any one of these gentlemen has not well deserved the distinction he has obtained, we learn without surprise that there are many other gentlemen, with very remarkable claims for service during the war, whose services have not yet met with either of these rewards. It appears that presence at the battles of Alma and Inkermann has been the test upon which both these distinctions have been distributed; and officers who served throughout the trying epidemic in Bulgaria, through the still more trying trench-work during the first winter's siege of Sebastopol, and at Scutari, have been altogether unrewarded either by promotion or honorary distinction. Among the hardest of these cases is that of Mr. Blenkins, Surgeon of the Grenadier Guards, who simply from ill-health incurred by service in Bulgaria happened to be absent at the Alma and Inkermann, yet who served all through the most trying portions of the siege and to the end of the war. We are happy to hear that the claims of Mr. Blenkins have been brought very strongly before the Duke of Cambridge both by the Colonel and General of his Division, and we trust they may meet with such success as to establish

the principle that long and efficient service with an army in the field and in camp shall be rewarded, even though illness incurred in the execution of duty may have led to accidental absence from two engagements.

We find, from a communication which has been forwarded to us, that the Governors of the Devon and Exeter Hospital have lately passed a statute, excluding all practising Physicians, Surgeons, and Apothecaries from a seat at the Committee to which is delegated the management of the affairs of the Hospital. To understand the exact meaning of the statute now adopted, it must be observed that the question raised is not whether the Medical Officers of the Hospital shall be *ex officio* members of the Committee, but whether Medical gentlemen in general, who have contributed, in common with the laity to the funds of the Hospital, shall be ineligible for a seat in the Board by which its affairs are managed. We are entirely unable to comprehend the meaning of such a law, which, while it is insulting to the Medical Profession at large, is obviously unjust to those of its members who have subscribed to the support of the Institution; and it is positively injurious to the Charity, by excluding Medical men from deliberations in which their voice ought to be the most influential. In a letter, written on this subject to the President of the Hospital, Dr. Shapter very pertinently remarks:—"It would, in fact, strike one as sufficiently absurd, if a prominent statute of a legal institution were to be, that practising lawyers should be excluded from all regulation of its affairs; or if that of a Church institution should declare officiating clergymen to be incompetent to sit upon its Committees; and yet this course has been pursued in the case of a Medical Institution as against Medical men." We hope that the Governors of the Hospital will have the good sense to rescind so absurd and so impolitic a statute; but we understand that Dr. Shapter himself, acting under legal advice, is determined to assert his own claim to sit as a member of the Committee, he having done so before the passing of the statute in question, it being maintained that the law cannot have a retrospective operation.

In the Lords Justices' Court, on Monday last, a case was decided involving the question so often made the subject of legal investigation, whether an old gentleman, of rather advanced years, and of failing memory, is capable of making his will and managing his own affairs. It appeared that the testator had lived for many years with his niece and her husband, and had executed a will leaving them the bulk of his property; but at the end of last year he suddenly changed his quarters to the house of his wife's niece, revoked his former will, and left his money to the new favourite. Under these circumstances his niece and her husband presented a petition, alleging that the testator was of unsound mind and unable to dispose of his property. Seven Medical gentlemen were consulted, three of whom pronounced him to be of unsound mind, and four declared him to be perfectly sane; and as there was thus only a majority of one against the supposition of insanity, Dr. Forbes Winslow was called in as an *amicus curiæ* to decide upon the delicate point. He gave in a report in favour of the soundness of intellect of the testator, as he could discover no indication of imbecility except occasional want of memory, when suddenly requested to give a detailed account of his somewhat complicated property. The Lords Justices dismissed the petition, thus establishing their opinion of the soundness of mind of the testator; and the following somewhat homely remarks made upon the occasion by Lord Justice Knight Bruce, contain perhaps the pith of the story, and the true nature of the case:—"It is no doubt very disagreeable that an aged and wealthy uncle should suddenly exhibit a preference

for his wife's niece at the expense of his own. There is, however, no help for it. Aged and wealthy men will be capricious." And we may add, that such capriciousness does not constitute insanity.

The second competitive examination for fifteen Assistant-surgeons in the army will take place on the 19th inst. We are sorry to hear that there are very few candidates for these appointments, as the system of competitive examination is on its trial, and it is possible that if a sufficient number of candidates do not come forward, the Minister for War may return to the old system, and the path now open to simple unassisted merit may be again surrounded with difficulties.

The request that a Medical officer from each of our large Hospitals should inspect the plans of the new Military Hospital at Netley has been a good deal talked about and misunderstood. The facts of the case are as follows:—The plan of the new Hospital was drawn up by a Board consisting of a Medical officer, an officer of engineers, an architect, and the Deputy Quarter-master General. The plan was submitted to Dr. Andrew Smith, and approved by him with some modifications. The plan, without these modifications of Dr. Smith (the most important of which were the separating the water closets from the wards, and the restriction of an outer building of two stories to one story), was published in the *Builder*. Guided by this incorrect plan, the Medical officers of the Middlesex Hospital made a representation to the Board, pointing out certain objections to the published plan. Upon this the Board requested the opinion of a senior Medical officer from each of the other Hospitals, and obtained a very general approval of the plan with the alterations which had been directed by Dr. Smith long before the authorities of the Middlesex interfered in the matter.

At last one Medical officer has been decorated with the Victoria Cross. Assistant-Surgeon Thomas Egerton Hale, M.D., of the 7th Regiment, is the man the Queen has honoured; and the following are the reasons given in Tuesday's Gazette:—"First, for remaining with an officer who was dangerously wounded in the fifth parallel on September 8, 1855, when all the men in the immediate neighbourhood retreated, excepting Lieutenant W. Hope and Dr. Hale; and for endeavouring to rally the men in conjunction with Lieutenant W. Hope. Second, for having, on September 8, 1855, after the regiments had retired into the trench, cleared the most advanced sap of the wounded, and carried into the sap, under heavy fire, several wounded men from the open ground, being assisted by Sergeant Charles Fisher, 7th Royal Fusiliers."—These are deeds which should live in the history of our Profession.

Dr. Waller Lewis's excellent Report on the Health of the London Postmen in 1856 shows the great utility of the plan of appointing a Medical Officer to all our large Government departments. The Customs, the Post Office, and the Board of Inland Revenue, have now a Medical Officer, and it is to be hoped that we shall have a yearly report on the sanitary condition of each of these departments. The experience already acquired proves beyond dispute that the salary paid by Government to a Medical Officer is far more than repaid by the saving effected by the examination of candidates securing a good state of health in those entering the Government service, by the prevention of illness by sanitary precautions among those employed in each department, and by diminishing the amount of absence from duty from alleged indisposition.

The Society of Apothecaries have issued a manifesto, in which they acquaint Medical students and teachers that the Latin language is at present very much neglected, and that students are plucked because they cannot read prescriptions grammatically. The worst part of the business is, that it seems as if some young gentlemen who had passed the Preliminary Examination in Classics, had afterwards been rejected for their inability to read those very unclassical productions, called physicians' prescriptions. The root of the whole matter is, that boys are not well taught at school: if they are, they do not forget their Latin in four years; and if they are not, the case is hopeless. They may *get up* a few pages of Celsus, as a parrot would; but as for reading the language like scholars, the less time they waste in the attempt the better.

REPORTS

ON

THE RELATIONS OF FOOD AND DISEASE.

No. IV.

DISEASED MILK, ITS CHARACTERS AND EFFECTS.

WE have insisted several times on the importance of tracing out such connexions as may exist between milk in a diseased state, and the various disorders of the human subject to which such diseased fluid may give rise. It is clear that if any forms of disease are traceable back to animal foods as a cause, milk is the alimentary substance *par excellence* which would call for rigid investigation. As a food it directly connects one human body with another, and animals of an inferior with animals of a superior race. In itself, and in its pure and normal state, it is a standard food, a secretion direct from the blood, a thing ready at once for the stomach without any assistance of Soyer, and the ready-made universal provender for the period of infant life.

We may then call milk the representative food, and we may learn from its composition more physiological truth regarding natural foods for man than from all the carnivorous, omnivorous, and herbiferous disputants who have ever formed themselves into societies for the propagation of their own peculiar food dogmas.

With these great facts before us, that Dame Nature, bringing daily into existence millions of living bodies, says to them, "Now, you little cannibals, to your animal mothers for your animal victuals!" and when she makes them live for long periods on this, and won't let them live healthily on any other food—with these great facts before us, we repeat, is it not clear that the natural study of all foods lies in the simple study of the first food of man? and further, that the natural and the unnatural conditions of this food deserve to be thoroughly investigated and thoroughly explained.

In considering the question of diseased milk and its relations to the diseases of animals, we enter into a wider field of research than has opened itself to us in our previous inquiries. To this point we have considered the transmission of diseases from inferior animals to man, through the medium of food. Now, in addition to such work we have engrafted on the subject the transmission of diseases along the great human family by the same food medium.

Up to the present time the attention that has been paid to the characters and the influence of diseased milks, has been to the last degree limited. The fraudulent adulteration of milk, on the other hand, is a point which has been well worked out, by Chevalier, Hassall, and many other industrious observers.

It will not be lost time for us to spend a few moments in pointing out what have been, and what are still the difficulties which lie in the way of an accurate knowledge of milk in its pathological states, and of its effects as thus modified.

1. It must be remembered that among the natural constituents of milk there are, especially among its saline parts, some which in excess have the effect of exerting an injurious influence on those partaking of it. On the opposite side, a diminution of certain parts of the milk, such as the casein or the fat globules, may deprive the fluid of its supporting power, and may thus, in those depending on it solely

for subsistence, by negation give rise to disease. In these considerations we have opened to us the same questions as spring up in relation to the influence of the flesh of over-fed animals and exhausted animals.

2. The limits of our science prevent us from tracing out many of the agents by which diseases may be propagated through milk as the vehicle. We take small-pox virus from a pock, or syphilis virus from a chancre, and we know that in our hands there is, in either case, a veritable poison buried on the lancet point. Yet what this poison may be essentially it is impossible to tell; if, therefore, it thus concentrated before us cannot be veritably followed out, how can it be detected in milk, where it is certainly diluted, and is but problematically present? M. Donne spent a long time in endeavouring to trace the transmission of syphilis poison through milk, and failed.

3. As by the difficulty just named we are cut off from pursuing with satisfaction the direct transmission of endemic and epidemic poisons through milk, so by another difficulty we are prevented from tracing out even the more general connexion, that viz., of following milk as a poison to symptoms as effects. For in this line of inquiry the difficulty lies in isolating the special from the general, or rather, perhaps, in knowing what is the special, and what is *not* the general influence. A child is at the mother's breast—the mother contracts small-pox; a few days later the child takes small-pox. How did the child contract the disease? Did it imbibe it from the maternal breath, from the milk, or by accidental inoculation? It is true that, as a counterbalance to the difficulties here noted, the acquisition of certain negative facts may, and, indeed, have been made. In so far as it can be proved that milk from a woman or an animal suffering from any disease may be given to a child as food without exciting the same disease, in so far much valuable information is supplied.

4. It is necessary in examining milk containing any abnormal product, to consider the local, as well as the general, origin of such product. Saline substances, metallic poisons, and vegetable poisons, and some animal poisons, are at once traceable back to the general system of the mother. But other foreign matters, say pus, say blood corpuscle, may be local, as well as general, in their origin. They may be thrown out of the system, they may be merely from the secreting gland, the result of local disease only, or of local accident.

5. Having proved the existence in milk of certain abnormal products, it is again a most prominent difficulty to connect the presence of certain of these products with any set symptoms. The effects of saline matters in excess, of fatty matters in excess, of metallic poisons, of some vegetable poisons; the effects of certain deficiencies in the nitrogenous or respiratory constituents of milk; all these we may understand as affecting the animal feeding on the milk; but of the possibility of the organic animal poisons being thus transmitted we have yet to learn everything that is affirmative, and to learn with more accuracy that which is negative.

Content at this time with thus pointing out for future inquirers the difficulties which have to be met, we turn now to the task of putting together such scanty materials as have been gathered regarding the normal and abnormal properties of milk.

The standard chemical physical qualities which should be met with in a specimen of good milk, newly drawn, are as follow:—The fluid should be of alkaline reaction: this applies to the milk of all animals. The specific gravity should be about 1030: this applies to the milk of the woman and to that of the cow. The taste should be slightly sweet, and free from saline qualities. The colour should be of a yellowish white, opaque, free from blueness on the one hand, and marked yellowness on the other. Microscopically it should present the well-known fat globules, which average about $\frac{1}{1000}$ of an inch in diameter, and are soluble in ether, but insoluble in caustic potash. These globules should float freely over each other, and present no tendency to adhere. All granular bodies having a viscid appearance and a tendency to agglutinate should be absent, as well as globules having unequal borders and dotted surfaces, or the ordinary red corpuscles of blood. The odour of milk should be slightly aromatic, free from pungency, and from any kind of fœtor or acidity.

The natural constituents of milk vary. According to Chevalier, in a deduction from the analyses of cow's milk by Berzelius, Henry and Chevallier, Boussingault and Lebel,

Quevenne, Lecann, Haidlen, F. Simon, Herberger, Poggiale, Playfair, Regnault, Payen, Lehman, Vernois and A. Becquerel, the milk of the cow should yield from 12 to 14 in the 100 of solid matters, viz., 3.6 of butter, 3.9 of casein, and from 5 to 6 of sugar of milk and salts, the water constituting the remaining part. Becquerel and Vernois found in the milk of the Hospitals of Paris a proportion of water varying from 84.9 to 97.2 per 100. The weight of butter diminished sensibly with the augmentation of water. The butter varied from 6 to 1.6 per 100, and similar variations occurred in the quantities of sugar.

The salts of milk also undergo marked variations both in quantity and in quality, and this so much under the influence of variations of food, that possibly no normal standard of milk salts can be supplied. Following Quevenne, Chevalier gives the following saline substances as parts of milk:—

Alkaline lactates, and often free lactic acid.

Salts, with ammonia as the base.

Phosphate of potassa and of soda.

Chlorides of potassium and of sodium.

Phosphate of magnesia.

Phosphate and carbonate of lime.

Fluoride of calcium.

Silicate of iron?

Sulphur?

Free alkali, combined with the organic materials of the milk.

These are but the general characteristics of good milk, but when the physical qualities above-mentioned are all present, and the proportion of casein and fat are normal, the milk may be considered as possessing all the qualities which would render it efficient as a nitrogenous and respiratory food, and, as a general rule, as free from any agent which would act deleteriously. This last rule, however, must not be accepted as absolute in the present state of our knowledge.

From the consideration of the normal constituents and qualities of milk we may turn to those which are abnormal.

The abnormal states are of two classes:—

1. Those arising from modifications in the quantity of one or other of the natural constituents.

2. Those arising from the presence of some foreign substance in the secretion.

In milk modified by either of these sets of causes certain physical or chemical differences are met with which indicate, more or less, a diseased condition.

In the first place, according to some observers, the milk when passed may have an acid reaction. This is denied by others, who opine that the acidity may in such cases take place so rapidly after the milk is withdrawn, as to lead to an incorrect inference as to the condition of the milk before being drawn. On the other hand, it is not doubted that in certain diseased conditions, in which the suckling animal is suffering from impoverishment, or from diseases of an adynamic type, the milk is super-alkaline, and is slow in developing its power of coagulation.

The specific gravity of milk may undergo many changes. It may be below the standard under certain diseased conditions, above it in others. We have seen that in cow's milk the water may reach 97 per cent., and that the proportion of butter and sugar may fall in a proportionate degree. Such milk is simply inefficient as an article of diet. In determining the nourishing qualities of milk, it is necessary, however, to remember that the specific gravity of the fluid is not, *per se*, to be accepted as a sign of impoverished milk. On this point Dr. Hassall has some very judicious remarks:—

“According to M. Lassaigne, and other observers, the ordinary specific gravity of cow's milk at 50° Fahr. is 1031; as will presently appear by our own observations, the specific gravity is liable to the greatest variation, and but seldom reaches the density given by M. Lassaigne. It must be borne in mind, however, that temperature affects somewhat the specific gravity of milk; but, unless the extremes be very great, this circumstance will scarcely make any material difference in ordinary observation, and it will be hardly necessary to employ a thermometer.

“Fat being lighter than water, according as the amount of this varies in any sample of milk so will that milk vary in specific gravity; if the quantity be very considerable, *ceteris paribus*, the milk will be so much lighter, but, if very little, the density will be so much the greater. This is readily shown by taking the specific gravity of milk after the removal of the

fat, as of skim-milk or serum; if the quantity of fat be very considerable, the difference of specific gravity will amount to several degrees: thus a milk may be of a low density from excess of fat, or it may be of high specific gravity, arising partly from the deficiency of it. In most cases, however, a high specific gravity obtains in milk possessing the ordinary per-centages of cream. In some samples we have observed both a high specific gravity and excess of cream; this must have arisen from the presence of a large quantity of cheese or sugar. It thus appears that a milk may be of a high specific gravity, and yet yield but little cream; or it may be of low specific gravity, and yet afford a very large quantity of cream; also, that the extraction of the cream increases the density of the milk several degrees."

These facts in relation to the specific gravity of milk are important, and it may be that a milk of good quality in some cases has a low specific gravity. Whenever a low specific gravity obtains, however, the nutritive power of the milk must be considered as at least doubtful, since, as it indicates either an abundance of water or of fat, or of both; it indicates also, as a general rule, a deficiency of sugar and of casein, substances quite as important as the fat in their way.

The variations which milk may undergo in regard to taste are an insipidity, due to an absence of sugar or an increase of water; an absence of the oily taste, incident to a deficiency of fat globules; an acid taste, from the presence of lactic acid in excess; and a saline taste, due to the supersecretion of one or other of the salts. In some cases of low febrile states the milk has been so offensive to the taste as to produce nausea, in other cases it has had a soapy taste from excess of alkali. The flavour of milk varies also with the varieties of food on which the animal is fed. From carrots, onions, and turnips it receives a special flavour. The colour of milk may vary considerably from abnormal causes. When deficient in fat globules it loses its opacity, and has a bluish watery appearance, such as is shown in what is called skimmed milk. Variation in colour from a deep yellow to a blue may arise from another and different cause. According to M. Fuchs, these modifications are due occasionally to the presence of an infusorium, the *Vibrio cyanogenus* in the case of blue milk, the *Vibrio xanthogenus* in the case of the yellow milk. These animalcules appear to be colourless, but may, according to their species, cause the milk to be blue or yellow. They can multiply and support themselves for a long time in an infusion of marsh mallows. The use of sea salt appears to remove the particular condition which produces these phenomena of difference in colour. The cows from which these kinds of milk have been derived have not themselves shown any peculiar symptoms of disease, nor have they been subjected to any peculiar form of diet. The milk of the cow is the only milk, as far as we know, in which this animalcule has been detected. Bailleul has investigated the colour subject as well as Fuchs, and ascribes the phenomenon to the presence of a byssus.

Regarding this blueness of colour, Lehman states that his observations have been limited to the ordinary manner in which milk acquires this blue tint. When freshly drawn, he says, the fluid is generally perfectly white, assuming the peculiar blue colour on the formation of the cream, which exhibits pale blue specks, extending at first scarcely a line deep, and appearing in detached groups on the surface of the otherwise white fluid. These specks become darker, and gradually increase downwards and laterally, until they commingle. The curd which separates from the cream is colourless, and the bluish cream contains rod-like colourless vibriones, similar to those described by Fuchs. Lehman has only once observed a distinct formation of byssus.

Very rarely milk is met with having a rose-red tint. When this occurs, the fluid may be suspected of containing either blood-cells, or dissolved hæmatin. This may arise from purely accidental causes, such as the rupture of some of the smaller vessels in the mamma. Indeed it is doubtful whether blood in milk is ever derived from any other source.

The milk which passes for a few days after the commencement of lactation, to which the name of "beastings" is applied, has a peculiar turbid yellow appearance, and a strongly-marked alkaline reaction. The yellow appearance, as a general rule, goes away on the third day, but sometimes continues much longer; some instances have been adduced in which it has continued in women for many months, and has produced injurious results in the child, as we shall have occasion to

show in the sequel. According to Lehmann, the colostrum appearance may re-occur at any period of lactation, upon the supervention of one or other of the acute inflammatory diseases.

REVIEWS.

On Stricture of the Urethra. By HENRY SMITH, F.R.C.S. Surgeon to the Westminster General Dispensary; formerly House-Surgeon to King's College Hospital. London: Churchill, 1857. Pp. 280.

EVERY-ONE who is acquainted with London Surgery and London Surgeons can scarcely fail to be acquainted with the author of the book before us. Fearless and free-spoken, of independent position, and pursuing his profession without the advantage of connexion with any large Hospital or Medical School, he yet has acquired an amount of experience, and has achieved successful operations of which Hospital Surgeons need not be ashamed. In the book before us, as in his other writings, he is thoroughly characteristic. Fair to everybody, although confessing a certain justifiable deference to his patron and preceptor Mr. Fergusson; displaying an ample familiarity with modern Surgical literature, and yet laying claim to that particular kind of information which cannot easily be obtained from books; giving the results of personal experience, and in so doing, telling of failures as freely as of successes, Mr. Smith has produced a book which will be of immense service to all who, like himself, desire to rely on their own experience, and to work out for themselves the practical value of remedies which others are busy in advocating.

Our limits, we need scarcely say, do not allow us to give any minute analysis of Mr. Smith's book. Suffice it to say, that he begins systematically with an account of the anatomy of the urethra. Then comes a chapter on the nature and pathology of stricture, and its varieties; then of the symptoms and causes, which matters are discussed in about sixty pages; whilst the remainder of the work is taken up with the all-important subject of treatment—by dilatation, cauterization, and incision. Of dilatation, our author describes three modifications: "simple dilatation, permanent dilatation, and rapid or forced dilatation." Cauterization, he tells us, may be accomplished with the nitrate of silver, or with the potassa fusa. Lastly, there is *incision*, under which somewhat comprehensive term we place several varieties which are practised by the Surgeons of the present day;—1st. *Internal incision*, performed either from before backwards, or from behind forwards; 2ndly. *Incision of the stricture from the outside, or perineal section*, of which proceeding there are also two varieties; 1st. The section at the point of an instrument which cannot be passed through the stricture; and 2ndly. The section performed upon a grooved instrument, previously passed along the urethra into the bladder."

This, then, is Mr. Smith's *carte*. We can only touch upon a very few details. Mr. Smith greatly prefers the simple wax bougie, and he says, "I am convinced from what I have seen, that were it more frequently employed, patients would suffer less than they do, and that a speedier cure would be effected in certain troublesome cases." He discusses the objections against wax bougies, their softness, and the tendency to give against the stricture, and balances these against the greater irritation caused by metallic instruments, and their liability, in coarse hands, to miss the orifice of the stricture, and be made to bore a false passage. Nevertheless, our author, as he employs no instrument exclusively, can speak of the merits of each. "When the stricture has been opened up so far as to admit a good-sized instrument, a silver catheter or metal sound may be passed with much more facility, and with less likelihood of doing mischief; and as, undoubtedly, dilatation can be carried on with it more quickly than with the less resisting bougie, it should almost invariably be employed at the latter stage of the treatment."

Of caustics, Mr. Smith employs the potassa fusa, in impermeable stricture, or in undilatable stricture, or in that which is complicated with urinary fistulæ; and he appears to exercise sound discretion in the use of it.

"I do not think," says Mr. Smith, "that the Surgeon possesses any means of *curing* an organic stricture absolutely and entirely; because, if such were the case, we should not

find the disease return, as it certainly does, if not attended to. But in dilatation we have the means of getting rid of stricture for a time; and if the patient is careful enough to continue the use of bougies occasionally during his lifetime, there is reason to believe that he will not suffer again. And in the potassa fusa the Surgeon has the means of assisting dilatation when it is inefficient; and it appears to me that we should consider it chiefly in the light of an adjunct to dilatation, so as not to be led to trust to it alone, or to be led into using it too frequently."

One case is given, in which, as our author fairly remarks, he should not *now* use the caustic. It was followed by abscess. The relation of one case of failure is worth half-a-dozen of successful treatment.

On the subject of Section of the Urethra Mr. Smith enters with considerable minuteness, and gives abundant details of the progress and results of cases which he has watched, after the performance of section by himself and by Mr. Fergusson and other Surgeons. More especially with reference to the Perineal Section, *par excellence*, the section of the strictured part on a conductor, Mr. Smith treats the subject copiously and fairly.

"It certainly is much to be wished that the future history of cases published by Mr. Syme and others could be traced and made known. However, as in other matters of importance, time will assist in proving the utility and expediency of this measure; and, in all probability, it will be found that it is not so safe and beneficial as its admirers would have us believe, nor so entirely useless and dangerous as its violent opponents would deem it to be.

"There cannot, however, be a doubt that this operation of perineal section, if employed at all, should only be adopted in those cases where every other remedy has failed; for it is a very serious matter to hazard the life of a patient, who is, in other respects, in good health, and more especially when it is found that an instrument, however small it may be, can be passed through a stricture. That Surgeon cannot be sufficiently blamed who could rashly adopt such a procedure when he knows that it has been attended with fatal and most serious results. At all events, the Surgeon is only justified in reporting to this operation when the case is otherwise intractable, and after he has fairly placed before his patient the liability he must submit to of exposing his life, or, at least, has stated to him that the operation is not without some danger. At the same time he may hold out a prospect of effecting most material relief—relief, too, which will be permanent, if he will only take the precaution of resorting occasionally to the use of the bougie during his lifetime."

We have said enough to give our readers a fair idea of the matter and the manner of the volume before us. It remains that we repeat our recommendation of it to the Surgeon in actual practice, and again state our conviction that it is a thoroughly *honest* book—a thing not to be despised in the present day.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON AUSCULTATION OF THE HEAD IN CHILDREN.

By Dr. HENNIG.

The object of this paper is to make more widely known the results of some investigations undertaken by Dr. Wirthgen at the Children's Hospital, Leipsie.

Certain sounds are audible when the ear or stethoscope is placed over the anterior fontanelle, the posterior fontanelle, and, in some children, the lateral fontanelles. The sounds may sometimes be heard along the lines running from the anterior fontanelle to the temporal region, as also, though less frequently and less plainly, along that connecting the two fontanelles. In some children not only are the sounds heard in all these places, but over the whole cranial vault, down to the spinal processes of the cervical vertebrae. Weber's flexible stethoscope is usefully employed when the child is restless or lying in bed.

These sounds may be heard from about the twentieth week to within the sixth year, at all periods of the day and in all positions of the body. In some they are first perceived

in the eighteenth week, and in others in the twenty-second or twenty-third, and continue as a rule until the fontanelles are closed in the third or fourth year. There are other sounds distinguishable from these, which are perceptible in the vicinity of the closed large fontanelle, but not before the fifth year. The earlier of these consists in an uniform vesicular sound, which gradually subsides into a gentle murmur. It is unaccompanied by any tone, although liable to be rendered louder during violent respiratory efforts. The sound which is heard at the later period, is composed of a double impulse, a stronger and a weaker one. The former, which are audible in the heads of healthy children from the eighteenth or twenty-third week, are, in the author's opinion, dependent upon the arteries of the brain; and he enters into a long disquisition upon the physical properties of these vessels, which we have not space to notice.

This vesicular sound is louder in proportion to the advanced ossification of the skull (the fontanelles still being open), the development of the general muscular system, the strength of the impulse of the heart, the more yielding condition of the walls of the blood-vessels, and the watery condition of the blood. It is more feeble when the nutrition and strength of the child are defective, when the cranial bones are thin and soft, on the recovery from hydræmia, and at the commencement of those conditions which give rise to abnormal tension of the coverings of the brain. The sound entirely disappears when the cerebral vault is entirely closed, in very feeble, atrophic children, in acute hyperæmia, in exudation and transudation within the cranium, and when the sinuses are obstructed by coagula.—*Vierordt's Archiv.*, 1856, p. 411.

AFFECTIONS OF RAILWAY ENGINEERS AND STOKERS.

By M. DE MARTINET.

In a memoir presented to the *Académie des Sciences*, M. de Martinet draws attention to the ill effects that result to these functionaries from their exposed position. This in the first place exposes them to the inconvenience of a sharp current of air, which paralyzes respiration and causes congestion of the face. Next, positive disease is engendered by the inspiration of the carbonic oxide and carbonic acid gas. The nervous system becomes injured, emaciation takes place, the generative power is lost, the muscular system exhibits twitchings and convulsions, and the intellect is enfeebled. Cold affusions to the spine constitute the best treatment: but as a prophylaxis the author presses upon the railway administration the desirableness of reducing the work of their operatives by doubling their numbers, and furnishing the machines with a protective gallery, like that of Crampton's machine. Not only is the health of several thousand workmen in question, but likewise the safety of the passengers; for the exhaustion produced by long exposure to the cold air paralyzes the powers of the men, and does not leave them the presence of mind necessary for the management of the machines.—*Comptes Rendus*, tome xlv. p. 391.

EXCERPTA MINORA.

Hiccough.—Dr. Corson related a very interesting case in which a most obstinate hiccough was due to diaphragmatic pleuro-pneumonia, and was protracted during three weeks, the patient having no sleep during nine successive days. When the affection is connected with inflammation or low types of fever, it is a very serious affair for the patient, and a source of great anxiety to the practitioner. Where it is purely nervous, musk and castor constitute the best treatment. Dr. Peaslee has seen the affection arrested by fifteen drops of chloroform given in mucilage every twenty minutes. He thinks there may be made three divisions of hiccough: 1. From general nervous irritation. 2. Extreme debility of the nervous system from want of vital energy. 3. Local irritation of some part contiguous to the diaphragm, generally the stomach.—*New York Journal*, March. p. 265.

Ointment in Fissure of the Anus.—Dr. Perrin recommends the following:—Ung. populeum 20, extract of monesia 4, acetate of lead 4, and extract of belladonna 2 parts. A sufficiency of oil of almonds to give the ointment a soft, homogeneous consistence.—*Journal de Chimie Médicale*, April. p. 237.

Dupuytren's Pomade for falling Hair.—Beef marrow, 250 grammes; acetate of lead, 2; balsam Peru, 5; alcohol at 21°, 25; tinct. cantharides, 1; tinct. of cloves and canella, of

each 10 drops. This is a highly efficacious preparation, a portion, the size of a nut, being smeared over the scalp every evening.—*Revue Méd.* 1857, p. 372.

Injection of Iodine in Uterine Hæmorrhage.—M. Dupierris, of Havannah, wishes to draw the attention of Practitioners to the great benefit that results from the injection of a third part of tincture of iodine, diluted with two-thirds of water, into the interior of the cavity of the uterus. He has employed this means in more than a hundred cases of non-puerperal menorrhagia, not only without ill effects, but with advantage. He has as yet only employed it in five cases of serious uterine hæmorrhage.—*Gaz. des Hôpitaux*, 1857, No. 37.

On the Choice of Purgatives in Typhoid Fever.—Dr. Tillard reprehends the practice of indiscriminately administering certain purgatives, such as the citrates, tartrates, etc., merely because they are of a more agreeable taste. In the process of digestion these become converted into carbonates, that exert a special defibrinating power upon the blood, which in these adynamic affections is already in a condition disposing to dangerous hæmorrhage. The poor, to whom these purgatives are interdicted by their expense, are much better off under the use of the sulphates. The vegetable purgatives are, however, indicated in affections in which the blood is too plastic. Mercury, also, by reason of its fluidifiant effect on the blood, should rarely be employed in these adynamic fevers.—*Revue Méd.* 1857, p. 265.

Balsam Copaiba in Psoriasis.—M. Hardy has been using this substance with good effect at the St. Louis. The treatment is commenced with a dose of about ʒj. of the balsam, which is gradually increased to double that quantity. It is given fasting, and between meals, the treatment continuing for a month and sometimes longer. The copaiba is in general associated with local means, but in some cases it has been given alone with success. It generally excites diarrhœa, which is, however, very well borne. The results that have been thus far obtained are satisfactory.—*Gaz. des Hôp.*, 1857, No. 40.

FOREIGN CORRESPONDENCE.

FRANCE.

[From our Paris Correspondent.]

PARIS, May 3, 1857.

ON Tuesday last the long debate of the Academy of Medicine ended. In a learned speech Velpeau gave the summary of all the proceedings of the different orators about the subcutaneous method. He summed up in the following words the claims of J. Guérin: "He has improved or modified the subcutaneous method; he has applied that method in a great number of cases; he has given general rules for its performance, but he did not invent it." Notwithstanding the urgent claims of Dr. Guérin, asking for the right of a closing reply, the bureau terminated the discussion. The controversy being now at an end, one may ask if physiology and surgery will have gained in such a debate, which has stopped, during four months at least, all the proceedings of the first Medical Society of France. I doubt whether any profit has resulted. The orators that have spoken upon the question have not brought forward new observations, new facts, anything that was not known before. Even the historical question of the invention of subcutaneous operations has not been settled with sufficient accuracy and in a complete manner. French Medical literature only has been questioned with sufficient accuracy; English authors have hardly been read, some of them are not known at all. The writings of German surgeons have also been inconsiderately quoted. At least such is the inference that results from a letter written to the Academy by Dr. Schnepf, in which that gentleman says that the writings of Dieffenbach, Stromeyer, and Pauli have been quoted in a contradictory manner.

Dr. Berard, the lecturer on physiology of the Faculty of Medicine, has published a curious and valuable report on the "Digestion and Absorption of Fat." Claude Bernard had thought, like Magendie and other physiologists, that the neutral fatty matters of the food, in order to become fit for entrance into the chylous vessels, ought previously to have undergone the emulsive influence of the pancreatic juice. In 1849 that celebrated physiologist attributed to the pan-

creatic juice a peculiar emulsive power, a power of resolving neutral fat into an acid and a base; he had found moreover that it was the chief, if not the only agent, in the digestion of fatty substances. These conclusions as to the importance of the pancreas in the digestion of fat were confirmed by what is seen in rabbits. In these animals, during digestion, the lacteal vessels are filled with fatty chyle only after the entrance of the pancreatic duct into the duodenum. Already Bidder and Schmidt, in Germany, had said that the cause of non-digestion of fat in the cases where Bernard had tied and cut the pancreatic duct was the occurrence of inflammation of the bowels. Professor Bérard, in a great number of experiments, made with Mr. Colin at the Veterinary School of Alfort, has seen in cows and bulls that the chyle of animals which had not a single drop of pancreatic juice in their intestinal canal, was of white colour, and gave eleven parts of fatty matters per cent. of solid residue. These facts prove that the pancreatic juice is not necessary for the absorption and the formation of emulsive chyle.

We have been astonished in Paris to read last month in a professional periodical, the *British Medical Journal*, a doubt as to the existence of sanitary science in the army. Persons acquainted with the history of military medicine know that a scientific code upon regimental hygiene is a matter well prepared by the labours of such men as Lind, Pringle, Larrey, Desgenettes, Marshall, Col. Tulloch, Balfour, etc. The only obstacle to its performance is the difficulty raised by commanding officers or by the commissariat on the score of expense, and by many other considerations. These sanitary principles once enforced, the officers of health of our armies would become as powerful a body as the engineers; but it is well known that such is not the purpose of the war-offices in any country of Europe, and least in France and England. Both these civilised people are still keeping military surgeons in a sort of subserviency and dependence to the other departments of the army. Neither the representative government in England; neither the representative, the republican, nor the imperial administration in France, have ever made any serious attempt to alter the old system, upon the decayed rules which are settled the sanitary questions that concern the health of the troops. Thus the medical body is lowered and deprived of any efficient control.

I have heard at the Academy of Sciences an interesting account of experiments made by Dr. Flourens to prove that the dura-mater, the ligaments, and the periosteum, are sensible when inflamed. That fact was known before, but, like many other physiological data, it was neglected because it was difficult, if not impossible, to explain the development of that pathological sensibility. Dr. Flourens has demonstrated that all the fibrous structures of our economy can become painful when irritated by external causes, such as blistering, in the same manner as they become sensible by the action of certain internal causes, such as gout or rheumatism.

The Concours for the Agrégation at the Faculty ended on Friday last. The eight competitors proposed by the jury to the minister who elects them are, for the greater part, clever, learned, and practical men. Such is the result of the mode of election in France; incapable persons are put aside, but very often the most clever, the most learned, are not appointed.

GENERAL CORRESPONDENCE.

MORTALITY AFTER CHLOROFORM.

(To the Editor of the "Medical Times and Gazette.")

SIR,—In the table showing the recent increase of mortality after amputation of the thigh, leg, and arm in four London, and fourteen Provincial Hospitals, in last week's *Medical Times and Gazette*, it appears to me that the high mortality after amputation of the thigh, as compared with those of the leg and arm, has been quite lost sight of.

To make the table a correct one, each particular amputation should be classified by itself. The results of the amputations of the thigh before chloroform, should be compared with the results of the same amputations after chloroform; and so with the amputations of the leg and arm. At any rate the whole number of thigh amputations in each period of observation should have been stated.

At present, though the table shows an increase of mortality of twelve per cent., Dr. Arnott has brought forward no proof of that increase being due to chloroform; it is quite possible that it may be owing to the number of thigh amputations having accidentally been much greater during the period of observation after chloroform, than in the corresponding period before chloroform. I am, &c.

Worthing, April 29, 1857.

ALFRED SHARPE, M.D.

THE PREJUDICIAL EFFECTS OF CHLOROFORM.

[To the Editor of the Medical Times and Gazette.]

SIR,—My attention was arrested the other day by some statistical calculations in the pages of your journal, by which it was attempted to prove that evil consequences have arisen from the inhalation of anæsthetic agents, which are now so universally employed in the practice of surgery. It can scarcely be considered beyond the province of one of the Metropolitan Officers of Health to deal with the question so far as it may influence the mortality in Hospitals; and in private practice every physician must be prepared to offer counsel to his patients on this subject when an operation becomes necessary, or to give an opinion in any case in which he is asked whether the general health of a patient be such as seems to contra-indicate its employment. The considerations on which our judgment is to be formed can scarcely be influenced by the result of such statistics as are brought forward by Dr. Arnott; if they prove anything, they would only go to show that chloroform ought to be abandoned altogether in the practice of surgery; they do not help us at all in discriminating the cases in which its employment is hazardous, from those in which we know that it has been given with the happiest results. I should not, therefore, feel justified in obtruding myself on your notice, were it not that having been engaged a good deal in making statistical inquiries, it seemed to me that the subject might be dealt with simply in its logical aspect as a question of evidence; and that, without offering any opinion at all upon the good or evil resulting from the prevalent practice, I might fairly point out some of the defects in the table referred to, which are such as ought not to pass wholly without notice.

Medical logic is as yet, I fear, a *res incognita*; but we are beginning to seek for it and to feel its importance, and ere long the fallacies which have hindered the progress of science must be cleared away. Already we have learned in great measure to throw off the yoke of empiricism; remedies are no longer relied on simply because they are consecrated by usage. We feel dissatisfied when a mode of treatment, introduced in compliance with the hypothesis of a bygone age, commends itself to our confidence by no stronger claim than that it has seemed to do no harm, or perhaps has on the whole even seemed to do good. We are startled from our propriety by finding rational people declaring that they do get well in spite of ignoring the whole catalogue of our materia medica, and placing their reliance upon inert and infinitesimal globules; and we naturally ask ourselves on what basis our whole practice rests, on what evidence we rely, in teaching the student of medicine that thus and thus he must act when such and such an emergency presents itself. To the thinking minds of our own day the science of medicine assumes a very different aspect from that which it wore even to the generation which immediately preceded; they indeed paved the way along which we are now treading; they effected the liberation of the natural sciences; we are seeking to free medicine from the trammels of hypothesis and preconceived idea, and to place it on the sure foundation of an inductive science. To some of the leaders in this movement we owe the introduction of the numerical method as a means of solving some of the important problems in the treatment of disease which are at present involved in so much obscurity; and it is in order that the value of this means of eliminating error and arriving at truth may not fall into discredit by illegitimate use, that I would claim the patience of your readers for a few minutes in investigating the facts and deductions of Dr. Arnott's paper.

Every one at all conversant with the true principles of the Baconian philosophy knows, that though its great founder may not have sufficiently guarded himself against the fallacies inherent in reasoning from effects to causes, he has specifically pointed out the fallacy arising *per enumerationem simplicem*, showing that no accumulation of evidence is sufficient to esta-

blish the truth of causation, except there can be deduced from it some law, some general principle on which the sequence is founded. This is a point which is very often lost sight of in making statistical inquiries; their true place in the inductive philosophy is in truth a very subordinate one; they serve to suggest a certain correlation between two facts which may be constantly found together, or to prove the truth or falsehood of some hypothesis, as its anticipated results are realised or not by the statistical calculations. But the correlation must be proved by individual examples in which the cause and effect are brought into distinct correspondence; and the hypothesis must at least be based on some known properties of matter which lend it a rational probability, until it can be substantiated or refuted by direct experiment. Unfortunately, in the living body experiment is not always admissible, is very often impracticable when its use might be permitted, and is necessarily more or less uncertain in its results; hence a third use has been made of statistics in calculating averages of mortality, by which means it is supposed that the minor influences affecting life may be eliminated. No doubt, if we can arrange a sufficient number of cases into two distinct groups, of which one does and the other does not possess some feature in common; if we can show that in other respects the cases in each were perfectly analogous, (*e.g.* containing a similar proportion of old and young, rich and poor, etc., similarly circumstanced as to time and place and other influences,) and further, if the resulting difference be definite and easily accounted for in the manner proposed, while no other reasonable explanation of it can be offered, we may then have fair grounds for believing that the presence or absence of this common feature is directly or indirectly connected with the result; but even then it cannot be admitted as a thing proved.

With reference to Dr. Arnott's table, I do not doubt that the cases are truthfully told, so far as he is concerned, and that they may ultimately prove of value as a contribution to our knowledge, in so far as it is of importance to know in such very general terms the probable mortality from the operations named. But I must distinctly demur to the cases grouped in the first column being taken as sufficient to establish the average, when all distinctions of sex, age, and constitution are merged; when hospitals varying so greatly in site, in construction, in means and appliances, are alike included; and the most important difference is disregarded between operations undertaken as a matter of necessity after accident, and those deliberately adopted for the removal of disease. Indeed I am not sure that under any circumstances the average of mortality, were it based upon thousands of instances so indiscriminately aggregated, would have any appreciable value.

The mortality of the second column is greater than that of the first. This is a simple enough fact; but, unfortunately, it is as uninteresting as it is simple. Probably, by taking some other principle of classification, the contrast might have been made much more striking—a month, or a quarter of a year, might have been far more fatal than the two years together. If the first column had been divided into periods of two years, there might have been some faint perception that 1855 and 1856 were more fatal than equal periods prior to 1846; but even this we do not know. In short, there is no attempt to show that the cases are analogous in any respect except in the fact of the operation, and they differ as manifestly in time as in the use of chloroform: from all the evidence adduced it would be as rational to attribute the greater mortality to the war, or to the circumstance that two epidemics of cholera had occurred in the interval. There is not the very smallest shadow of evidence to prove that chloroform had anything to do with the result, and I would earnestly recommend Dr. Arnott to study Mill's System of Logic, Book V. chap. v. before he again attempts such an important generalization.

I would scarcely have ventured to intrude these remarks upon the pages of your journal had we not been industriously holding ourselves up to ridicule as a Profession in the pages of a contemporary, by writing most illogically on the subject of tobacco. I hope that all who have contributed their mite to this controversy have profited by the sarcastic discussion in a well-known facetious periodical of the grave question, "Is eating salmon injurious?" It is much to be deplored that the first writer on this revived discussion, whose name is so well known both to the Profession and the public, should have given the reins to his fancy when he opened in serious soberness the Medical investigation of a question which for some weeks continued to employ the light artillery of various

correspondents. If it be one involving the health of the community it is surely worthy of being argued on sound logical principles. We might well leave the platitudes which were uttered to those who, in their ignorance of any such thing as causation in science, are always ready to take the *post hoc* for the *propter hoc*. Can we wonder that patients attribute their cure to homœopathic globules, when the Profession, through the pages of an accredited Journal, or by the pen of a known writer, have been attributing insanity to the effect of a cigar, without the least attempt at an argument in its favour? As with the chloroform, I should be sorry to give publicity to an opinion on either side without some data on which to ground it, and it is with no feeling of partiality that the weakness of the reasoning has been pointed out. The *onus probandi* has been assumed by one party, and it was their business to offer their proofs in a logical form. Had Dr. Arnott contented himself with exposing Dr. Simpson's fallacies, he would have done good service in discussing an important question. He has now placed himself in a similar predicament.

I am, &c. A. WHITE BARCLAY, M.D.,
Medical Officer of Health for Chelsea.
Bruton-street, April 30.

PUBLIC MEDICAL APPOINTMENTS.

(To the Editor of the "Medical Times and Gazette.")

SIR,—Mr. Gamgee has directed "general attention through your columns to the dawn of a new era in the system of public medical appointments," and has instanced the laudable prohibition of canvassing in the election of a physician to the Queen's Hospital, Birmingham.

Permit me to draw attention to another paragraph in the same advertisement, issued by Professor Sands Cox, in which he intimates that no one is eligible as a candidate, who is not M.D. of Oxford, Cambridge, Edinburgh, Dublin, or London.

I feel confident, Sir, that the unanimous voice of the Profession will pronounce the exclusion of the graduates of other universities neither just and liberal, nor likely to promote the interests of the Charity.

By this law, the late lamented Pereira (who was M.D. of Erlangen) and Golding Bird (M.D., St. Andrews) are pronounced unfit to hold the office of physician.

At our London hospitals no such rule is observed, as will be evident from the position of Dr. Andrew Clark, the talented contributor to the "Psychological," and Assistant-physician to the London Hospital, whose degree is dated from Marischal College. Dr. Little, of deformity notoriety, M.D., Berlin, and Senior-physician to the London Hospital. Dr. Steggall, M.D., Pisa, but Professor of *Materia Medica* at Charing-cross, late Physician to the Metropolitan Free, and well known for his *Student's Manuals*; and many of our first-class physicians, whose place of graduation I cannot, at the moment, call to mind.

Without at this time discussing the value of foreign degrees, I cannot but urge that there is a large body of graduates of British Universities whose claims are ignored by the Queen's College; and upon whom an unjust stigma is therefore endeavoured to be thrown. To elect an M.D., Edin., Oxon., Cantab., Dub., or even Lond., who had no other claims, in preference to such a man as Pereira, or Golding Bird, seems to me a sorry way "to analyze closely the claims of candidates, and to appoint the best one."

"A house divided against itself cannot stand," and no wonder when the Profession is thus invidiously divided if quacks find shelter and protection, while the rights and privileges of the qualified man are too often trampled under foot.

I am, &c.

May 2nd, 1857.

A RECENT SUBSCRIBER.

LACTIC ACID VERSUS PEPSINE.

[To the Editor of the Medical Times and Gazette.]

SIR,—I think it would have been well for the interest of Mr. Squire, the sole agent of Boudault's pepsine, had he contented himself with merely standing before the public as its vendor, instead of placing himself in the perilous position of its advocate, because many persons who, like myself, are unwilling to accept scientific matters upon the mere authority of others, may be inclined to inquire into the nature and properties of the so-called pepsine, and having made that inquiry may be induced to publish its results, as a warning to those who may be misled by the specious advocacy of interested persons.

As Boudault's pepsine is represented by Mr. Squire as the only genuine article, we may with propriety inquire, What is Boudault's pepsine? In answering this inquiry, I shall first avail myself of Mr. Squire's statement as to its nature.

According to that gentleman, "the rennet bags of sheep, opened and reversed, and washed under a thin stream of water, to free them from the alimentary matters, etc., the mucous membrane is then carefully scraped off with a knife, the cells are bruised in a mortar and digested for twelve hours in distilled water; the liquid is then filtered, and neutral acetate of lead is added, which precipitates peptate of lead. This precipitate is collected and decomposed by sulphuretted hydrogen, pepsine is thus liberated in solution, and separated from the insoluble sulphide of lead by filtration. This liquid represents a neutral gastric juice. It is, however, necessary that it should be acid; for this purpose, lactic acid is added until the liquid exhibits the same degree of acidity as a specimen of gastric juice obtained from the stomach of a dog, by means of a fistulous opening. This mixture, thus obtained, is evaporated to a gummy mass, and then reduced to powder by the addition of dried starch."—*Pharmaceutical Journal*, vol. xvi. page 472.

Now, I would venture to assert, that any Chemist reading Mr. Squire's process for making pepsine, above given, would consider, without further investigation, that it contains internal evidence of a daring presumption by calling any substance obtained by such process pepsine. If Mr. Squire were to treat almost any other fluid or tissue of the animal body in the manner detailed by him for producing pepsine, a mixture of bodies would be obtained possessing all the properties attributed to the so-called pepsine; that is to say, the mixture would be precipitated by acetate of lead, tannin, and alcohol, the tests employed by Mr. Squire for distinguishing—as he terms it—true pepsine.

But, after all, Mr. Squire must know that *true* pepsine is a myth. No Chemist, not even Lehmann, has succeeded in isolating this so-called substance. In fact, the question of its existence is only a theoretical speculation; and if Mr. Squire could succeed in presenting the scientific world with a specimen of *true* pepsine, if such a body really exists, he would perform a feat that our greatest Physiological Chemists have heretofore failed to accomplish.

Dr. Gregory, Professor of Chemistry in the University of Edinburgh, says, in his recent work on "Organic Chemistry:"—"All attempts to isolate the supposed principle—pepsine, as it was called—which is supposed by some to be the solvent of food in the stomach—have failed. The gastric juice has only yielded traces of animal matter, and we have not yet any proof that its solvent action depends on a peculiar compound, and is not rather the effect of a kind of fermentation induced in the food by contact with the particles of the dissolved epithelium, themselves in a state of change, and, consequently, of motion."

The most important question, however, at issue between myself and Mr. Squire is, Does Boudault's pepsine digest a certain quantity of fibrine? Here, again, Mr. Squire supplies the answer to this question, for he says that pepsine does not possess the power of digesting fibrine without the addition of lactic acid. I drew the same conclusion from my own experiments, and attributed the efficacy of Boudault's pepsine to the lactic acid mixed with it. In fact, if fibrine is treated with almost any acid, at a certain temperature, it becomes broken up, or, as the pepsine advocates term it, digested. I do not purpose to go into a physiological discussion with Mr. Squire, therefore I will only remark that his term "digestion" is totally inappropriate to the breaking up of tissues, when treated with acids, or the so-called pepsine, because the phenomena of digestion in the animal economy are totally different to those ascribed to artificial digestion.

With regard to the superiority of lactic acid over that of the so-called pepsine, as a remedial agent in the treatment of functional derangements of the stomach, I have only to say, that I have already prescribed it in nearly one hundred cases, and the good results which in a short time have followed its use fully warrant me in strongly recommending it in preference to the so-called pepsine, which I have known to be valueless in very many cases.

I am, &c.

WILLIAM O'CONNOR, M.D., Assistant-Physician
to the Royal Free Hospital.

30, Upper Montagu-street, W., May 5, 1857.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, April 7, 1857.

Dr. WATSON, President, in the chair.

Dr. WILKS exhibited a specimen of

FIBROUS DEPOSIT IN THE SEPTUM VENTRICULORUM OF THE HEART, PRODUCING SUDDEN DEATH.

It was sent to him by Mr. Dolman, of the Derby Infirmary, with the following history:—A. B., aged 23, a cattle-drover, while driving a beast at nine o'clock in the morning in the streets of Derby, was seen to fall suddenly on his face; he gasped two or three times, and expired. He was taken into the Infirmary, which was close by, and found to be quite dead. On post-mortem examination, all the organs appeared healthy, excepting the heart, and this presented a most remarkable form of disease, having a large tumour growing in the septum of the ventricles. It was very dense in structure, and creaked under the knife when cut; it could not be accurately defined, as the adventitious tissue was intimately mixed with the muscular fibre surrounding it; but, on grasping it with the hand, it could be felt as a tolerably round mass, of about the size of a billiard ball. It was covered with the serous membrane on each side, and projected more towards the right side than the left; indeed, there was a smaller nodule growing from it, which, protruding under the tricuspid valve, tended to close both the right auriculo-ventricular opening, and also the pulmonary,—the latter must have been considerably encroached upon, and the impediment thus offered to the exit of the blood, no doubt, was the cause of the sudden cessation of the heart's action. The cavities were of normal size, and there was no appearance of there having been any inflammation of the organ. In the absence of all previous history, a conjecture could only be formed as to the nature of the case and the cause of the remarkable growth. In fibrous degeneration of the muscular structure, from rheumatic myo-carditis or from chronic changes, the adventitious tissue might certainly be found in greater abundance in one part than another; but, in this case, every other part of the heart was quite healthy, as well as the pericardium and endocardium. Besides the inflammatory origin of the disease, Dr. Wilks suggested another cause—constitutional syphilis. Such an explanation occurred to him, on account of very similar tumours having been found in the muscles, and by himself, in the liver and testes of those who had died with this disorder. The microscope showed the growth to consist of nuclei, nucleated fibres, and much amorphous, translucent, albuminous material; in some spots it was degenerating.

Dr. WILKS also showed a specimen of

RUPTURE OF THE HEART,

which was sent to him by Mr. Hills, of the Kent County Lunatic Asylum. It was taken from a man, aged 61, who had been an inmate of the Institution for twenty-four years, being afflicted with dementia. He was a muscular man, and enjoyed excellent health. On the 29th of March he took his meals as usual, and appeared quite well, and went to bed as usual. On the following morning the attendant found him dead, lying on his right side, with his hand under his head, in his ordinary sleeping position; the bedclothes not disarranged, and not the slightest appearance of there having been any struggle. Upon post-mortem examination, the pericardium was found distended with coagulum, which had escaped from a rupture of the left ventricle of the heart. The laceration was in front, nearly transverse, and about $\frac{3}{4}$ of an inch in length, and situated about $1\frac{1}{2}$ inch above the apex. The heart was surrounded with fat, which had encroached very much upon the walls of the ventricle, and the neighbouring muscular tissue was very fatty. The coronary arteries were excessively diseased, particularly the anterior, which formed a bony tube at its upper part, and at its lower was occupied by masses of fibrin, which were entangled in its diseased coats, and were rapidly softening.

In contrast to these two cases, Dr. WILKS also showed a heart which had been removed that day from an old man who

died suddenly in his bed in Guy's Hospital. This was very fatty, and presented the ordinary senile changes, but was not ruptured, death being caused, as is most usually the case, from mere cessation of the heart's action.

Dr. MURCHISON exhibited a specimen showing

ABSCESS OF THE ABDOMINAL WALLS,

CANCER OF THE STOMACH, AND COMMUNICATION BETWEEN THE STOMACH AND TRANSVERSE ARCH OF THE COLON.

There were three fistulous openings in the left hypochondriac and epigastric region. These passed into a sloughy cavity, large enough to hold an orange, and which communicated both with the stomach and the colon. The opening into the stomach was large, and situated near the pyloric extremity; that into the colon just admitted a crowquill. In addition there was a large mass of cancerous (scirrhus) deposit, at the pyloric extremity of the stomach, which almost completely obstructed the pyloric opening. The stomach was firmly adherent at this part to the arch of the colon, the mucous membrane of which, however, was not involved in the cancerous disease. The patient from whom this preparation had been obtained was a coachman, aged 63, who was admitted into St. Mary's Hospital on November 11, 1853, and who died on the 11th of the following December. The symptoms were briefly as follow:—About a year before death, after the receipt of a blow on the part, an abscess formed in the right hypochondriac and epigastric region. This was opened, and pure pus escaped. After some months other two abscesses formed, which were also opened; the three fistulous openings continued to discharge. Simultaneously with the abscess severe dyspeptic symptoms showed themselves, such as pain in the region of the stomach, aggravated after taking food, &c. These symptoms became more urgent, the patient became greatly emaciated, rapidly lost strength, and died exhausted. For three or four weeks before death, fetid air was repeatedly observed to be given off by the fistulous openings in the abdominal wall, and ten days before death vomiting supervened, the vomited matters (as well as the matter exuding from the fistulous openings) having a fæcal odour, but not resembling fæces in other respects. Dr. Murchison made some remarks on the rarity of the lesion which the preparation illustrated; in all the London museums there were only four examples of it, and he believed the total number of cases recorded did not much exceed twenty. Reference was also made to Dr. W. T. Gairdner's view, as to the connexion between the occurrence of fæcal vomiting in these cases, and the absence of obstructive disease of the pyloric extremity of the stomach.—*Edinburgh Medical Journal*, July, 1855, p. 81.

Mr. LONSDALE exhibited a specimen of

TALIPES EQUINUS.

He was indebted to the kindness of Mr. Nunn, of the Middlesex Hospital, for the opportunity of showing the preparation. The points of interest it possesses are in connexion with a difficulty sometimes met with in the treatment of this kind of deformity—viz., the inability to replace the astragalus into its normal position beneath the articular surface of the tibia. The difficulty will be found to be owing to the shortened condition of the ligaments, more particularly in the posterior part of the ankle-joint, bracing the tibia firmly down to the os calcis, and so not leaving room for the entrance of the displaced thick portion of the astragalus. The astragalus is also altered in shape, its head being bent downwards. The calcaneo-cuboid ligament is also shortened, and prevents the cuboid bone being elevated.

Dr. GIBB exhibited an infant with

CONGENITAL EXTROVERSION OF THE BLADDER.

The child was 6 weeks old, born at the full time, and quite healthy. There was a deficiency of the anterior wall of the bladder, with a deficiency in the corresponding part of the abdominal parietes, at the lower part of which projected a round globular tumour, the size of a peach, of a shiny, glistening blood-red colour, the mucous membrane very distinctly showing the prominent papillæ. At the inferior portion of this tumour, the orifices of the ureters projected forwards the size of peas, and were seen to give exit to urine drop by drop, but on crying violently the urine flowed in a small stream. The penis projected forwards from the sides of the pubes, and was irregularly developed, the glans being divided into two portions; along its dorsum ran the urethra, which was an open canal, and a fold of prepuce was situated beneath the glans.

The testicles were in the scrotum. At birth there was some inflammation of the skin between the navel and tumour, which subsequently disappeared. The tumour after a few days became somewhat smaller and flatter, and the bright red colour was changed to a deep, pinkish red, instead of the deep red. The child in other respects was healthy, and took the breast well. Dr. Gibb was not certain upon the point, but he thought there were no corpora cavernosa. The pelvic bones were widely separated, and gave to each groin a prominent and swollen appearance.

Mr. BRYANT exhibited a specimen of

IMPACTED FRACTURE OF THE NECK OF THE THIGH BONE.

This specimen had been sent to him by his friend, Mr. William Hills, the resident medical officer of the Kent County Lunatic Asylum, with the following history:—

Ann C—, aged 66, on February 16th, 1853, fell accidentally in the ward and injured her right hip. There was about 1½-inch shortening, which could not be diminished by extension, and no crepitus, leading the Surgeon at first to believe that a dislocation was the form of injury.

The limb was put up in a long splint, and the patient was confined to bed for six weeks; subsequently she gradually regained strength in the limb, and was able to walk without assistance; the shortening, however, still persisted.

On July 30, 1854, seventeen months after the accident, she died from acute bronchitis.

This specimen was a good sample of the impacted fracture of the neck of the thigh bone, so well described by Mr. Smith of Dublin. The neck had evidently been driven into the bone for more than one inch, the direction of the canal of the bone indicating the extent. The major trochanter, as is usual, was also fractured. The symptoms during life clearly pointed to the character of injury, which the specimen well demonstrated.

Mr. BRYANT showed a specimen of

POLYPUS OF THE RECTUM.

A boy, aged 5 years, had come under his observation on March 23rd, among the out-patients of Guy's Hospital, having experienced constant bleeding from the anus for three weeks previously, unaccompanied by pain; and although frequently examined by his mother, without any visible cause.

On examining the patient the buttocks were found smeared with blood, and projecting from the anus was a small polypus, the size of a horse-bean. It was excessively vascular and congested, and had a neck about three-quarters of an inch long, connected with the bowel within the sphincter.

As the boy was an out-patient, Mr. Bryant applied a ligature to the base, to prevent all chance of bleeding, and having done so, the sphincter contracted and expelled the polypus.

When seen three days after, the boy was quite well. Upon examining the growth microscopically it presented the usual appearance of a fibro-cellular structure.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 28, 1857.

Sir CHARLES LOCOCK, Bart., President, in the chair.

A paper, by Mr. Solly, was then read on a

CASE OF DOUBLE TALIPES VARUS, IN WHICH THE CUBOID BONE WAS PARTIALLY REMOVED FROM THE LEFT FOOT.

The sufferer in this case was a South American, aged twenty-one, a stout muscular man of lymphatic temperament, difficult of control, and particularly sensitive to pain. Both feet presented perfect specimens of the deformity, the left being, however, much the worse, being shorter and more inverted than the other. None of the muscles of the lower extremities were perfectly developed. The treatment first commenced (June 7th, 1852) with the division of several tendons as well as the plantar fascia, and the application of mechanical apparatus; it was continued through the two following years, during which period two more divisions of tendons were made, and a variety of apparatus (including all the ordinary, as well as a variety of

novel, forms) employed. The result was good as regarded the right foot, but most unsatisfactory with the left. Such, however, was the peculiar character of the patient, such his impatience under pain or restraint,—leading him, as it did, to loosen the apparatus and remitting the pressure on every opportunity,—that Mr. Solly considered himself warranted in adopting the suggestion of Dr. Little, that he should remove the cuboid bone, which seemed the bar to the ultimate success of the cure. On June 11th, 1854, Mr. Solly accordingly proceeded to remove nearly the whole of the bone, cutting quite through it, and opening the articulation with the metatarsal bone of the little toe, but not that with the os calcis. So complete was the effect that the foot could immediately be bent beyond the mesial line in the outward direction, and the finger placed in the chasm was painfully pinched when the foot was so turned. The good effect of the operation, however, was much marred by the loss of three weeks which expired before pressure could be applied. The procedure was not attended with any constitutional disturbance, and the wound healed in fourteen days. In December, 1854, the tendons of the tibialis posticus and flexor communis were again divided; since that period, instruments have been relied on for the completion of the cure. The feet are now (January, 1857) fairly on the ground, and the patient bears his weight upon them, and walks with the aid of a stick. The author concluded by observing that although the operation for the removal of the cuboid bone had undoubtedly greatly facilitated the cure in this particular case, yet he did not consider the effect produced to be such as to encourage the profession to perform the operation, except in some few old and obstinate cases which might have resisted every other treatment; and in the event of a recourse to such a procedure, Mr. Solly advised the removal of the entire bone, as tending to produce a more permanent effect than resulted from the operation in this case.

Mr. LONSDALE said he had been connected with the Orthopædic Hospital for 13 years, and had seen hundreds of cases of club-foot, in persons of all ages, but he had never seen the least necessity for having recourse to so serious an operation as the removal of the cuboid bone. Mr. Solly did that in the end which he ought to have done in the beginning, using the long splint to keep the foot everted. By applying firm compresses or screw pads, everything could be done by mechanical means which Mr. Solly effected by the knife. In answer to the President, Mr. Lonsdale said he always divided the tendons as a preliminary part of the treatment.

Mr. W. ADAMS divided cases of club-foot into three classes: first, those occurring in infancy and youth; secondly, those in persons between 20 and 30 years of age; and thirdly, those in persons beyond 30. In the first class a cure could be effected in form and function, and this was one of the triumphs of modern surgery. The second class were very difficult to deal with; they might be cured in point of form, but not in function. The third class he regarded as incurable both in respect to form and function. For the second class of cases, Dr. Little first proposed the excision of the cuboid bone, with the object of diminishing the time of treatment from a year or a year and a half to 6 or 8 weeks. The result of the present case, however, had not borne out the anticipation, the difficulty having arisen from the impossibility of applying mechanical apparatus. The apparatus pressed upon the convexity of the foot, and the patient having a wound on the outside of the foot could not bear the pressure. This difficulty might be overcome by the employment of an apparatus which he had contrived, and which did not press upon the foot, but acted upon the principle of a straight splint, transferring the pressure from the foot to the leg.

Mr. SOLLY said he used the long splint in the early part of the treatment.

Mr. BRODHURST asked Mr. Adams whether he advocated the excision of the cuboid bone.

Mr. ADAMS said he was prepared to resort to any operation, whether of excision or amputation, that might be required by the exigencies of the case in the third class to which he had referred.

Mr. BRODHURST said the wound on the outside of the foot prevented pressure on the point where pressure ought chiefly to be made; but even if that wound did not exist, he thought it would be wrong to remove the cuboid bone. Considering the mechanical structure of the foot, he did not think that the cuboid bone had much to do with the deformity. The whole of the tension was on the inner side of the foot, where the

ligaments were the most rigid, and might be divided with advantage. He doubted whether a case could occur requiring the removal of any part of a bone from the tarsus. He had seen more severe cases than the one under consideration, and at the same time more successful treatment.

Dr. LITTLE thought that, taking all the circumstances of the case into consideration, the patient had every reason to be satisfied with what had been done for him. With regard to the removal of the cuboid bone, he had only suggested the propriety of that operation in cases of inveterate varus.

Mr. SOLLY said, as soon as the bone was removed the foot was brought into its normal position, and so striking was the effect that Mr. Adams, who was present, and admitted that he came prejudiced against the operation, declared that he was perfectly satisfied with the result. The ordinary mechanical means were in most cases sufficient. The removal of the bone, however, was a more rapid process, and in the present case there was no other obstacle to bringing the foot to its normal position.

A paper, by J. L. Milton, Esq., was then read

ON SCIRRHUS OF THE MALE BREAST.

The patient whose history formed the basis of this paper was a man aged fifty-eight, a healthy but very intemperate person, the father of nine children, eight of whom were still alive. No scirrhus could be traced in any of the family. He attributed the affection to the constant pressure which his employment (that of a brass-finisher) compelled him to make on the left side of his chest, just below the nipple. The disease began two months previous, as a small hard nodule, just below the left nipple. About four months afterwards, finding that it steadily increased in size, he applied to a "doctress," who gave him hemlock to use both outwardly and inwardly. The swelling slowly increased to the size of a walnut, and at the end of the seventh month sloughed out. When first seen, (three months later,) there was found a large cup-shaped cavity, the base of which was covered with a thick, tenacious, greenish secretion, dotted with black; the edges were thick and livid, but not everted. The surrounding skin and cellular tissue were extremely hard. In the vicinity enlarged cutaneous veins were noticed. There was a smaller ulcer just below, and several tubercles were seen in the vicinity. The ulcer was not offensive, and discharged a moderate quantity of sanious fluid; it occasionally bled very slightly, and was attended with but little pain or uneasiness; its surface was callous. One gland in the axilla was a little enlarged; the mammary gland on the right side was indurated; the lymphatic glands in both groins were somewhat harder and larger than natural. The patient had of late lost both flesh and strength. There was great difficulty of breathing. Stethoscopic examination revealed extreme feebleness of the breathing sound, interrupted by very long pauses. Left side dull on percussion; each respiratory movement attended with a heaving of the whole trunk. There was no expectoration beyond a little mucus. The pulse was small. Nothing abnormal was detected in the abdomen, but the urine was always brown, quickly became foetid, and was loaded with urate of ammonia. No operation was attempted; sedatives were given, but did not afford so much relief as ether. The breathlessness rapidly increased, and a choking sensation was felt on attempting to eat. During the last fortnight of his life he never lay down. He died May 3rd, 1856, five weeks from his first visit. No post-mortem examination of the internal organs could be obtained, but the tumour was removed; it was found to be very slightly adherent to the pectoral muscle. The tables accompanying the paper exhibited twenty (including the present) cases of this disease in the male, of which histories could be obtained, and thirteen of which the histories were defective. Of the former, one patient was an American, one an Italian, and one a Frenchman. Two, from the context, were also supposed to have been Frenchmen. The remaining fifteen cases, being all collected from the records of English hospitals, were assumed to have occurred in the persons of Englishmen. The writings of French, English, and American authors alone yielded any information on the subject. Those of German, Italian, Irish, and Scotch authors contained, with the exception of a clinical lecture by Mr. Liston, nothing of interest or importance. It was therefore very difficult, if not impossible, to decide with any certainty on the relative frequency of this disease in France, England, Scotland, &c. The cases collected warranted

the inference that it was equally common in those three countries, contrary, as the author believed, to common conviction. The earliest period at which the disease was found to have commenced was twenty years of age; the latest, in the eighty-third year. In three cases, the patients sank from extension of the disease to internal organs, in eleven, thirteen, and fifteen months. Three others died—two in four, and one in five years. In two of the three cases also from extension of the disease to internal organs; in the third, this was presumed to be the cause. In one of the cases, fatal in four years, there are some grounds for believing that removal would have warded off the fatal result. In one case of death from cachexia and exhaustion, the date was not ascertained. In seven cases, the disease was removed; the patients recovered, but had not been heard of since. Of five others operated on, one died six years after, without any return of the disease; one at the expiration of fourteen months; another, "a considerable time" after, had experienced no relapse; one was alive twelve years after; one unknown. One patient, not operated on, was living several years after the discovery of the disease. The early appearance of the disease in some of these cases reopened the question of whether it were dependent on decay of the reproductive faculty, or, according to Mr. Paget's opinion, on decay of nutrition? the author considered that, unless it were considered that a gland might grow prematurely old and diseased, as the hair follicles, teeth, and eyes will, in certain cases, it was difficult to admit either hypothesis. It seemed also doubtful if the cause and symptoms of this disease were alike in the male and female; the three cases in which death ensued at an early period, having been apparently attended with less pain and destruction of the breast than occurs in the female. It appeared from the average of the cases to be of a less fatal nature in man than in woman.

The Society then adjourned.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 1st of May:—

CURRIE, THOMAS HENRY, Bridgeham, Norfolk.
HUNT, ALFRED, Hammersmith.
IVES, ROBERT, Chertsey.
JEAFFERSON, GEORGE EDWARDS, Framlingham, Suffolk.
JONES, WILLIAM ALLEN, Oswestry.
PEIRCE, THOMAS DAVID, Abergavenny.
PRYTHERCH, JOHN, Lanerchymedd, Anglesea.
SWAIN, WILLIAM PAUL, Devonport.
WALKER, THOMAS JAMES, Peterborough.
WHISHAW, JOHN CHARLES, London.
WINSTANLEY, ROBERT, Wigan, Lancashire.
WOOD, NATHANIEL CLEMENT, Wainfleet, near Boston, Lincolnshire.

The following gentlemen were admitted members on the 4th inst.:—

BARRINGTON, NICHOLAS WILLIAM, Douglas, Isle of Man.
BIRTWHISTLE, WILLIAM, Beverley, Yorkshire.
BONAVIA, EMANUEL, Malta.
CHAPMAN, CHARLES EDWARD, Preston, Lancashire.
COLE, EDWARD HENCHMAN, Great Plumstead, Norwich.
DAY, HENRY ARUNDELL, Hambrook, near Bristol.
EDWARDES, ROBERT, Liverpool.
FERGUSON, GEORGE, St. Bartholomew's Hospital.
HUNTER, ROBERT CHARLES, Royal Navy.
KING, KNOWLES, Caius College, Cambridge.
WRIGHT, FREDERICK THOMAS, Assembly-row, Mile End-road.

YORATH, LEWIS WILLIAMS, Newport, Monmouthshire.

The following members of the College, having undergone the necessary examinations, were admitted licentiates in midwifery at a meeting of the Board on the 6th inst.:—

DAY, EDWIN EDMUND, Acton.
GOODALL, RALPH, Leabridge, Newcastle, Staffordshire.
GRAY, WILLIAM, Camberwell.
HARRIS, LEWIS, Broadhempstone, Totness, Devonshire.
HOOKER, EDWARD MILES COVERDALE, Sheerness.

JEPSON, GEORGE THEOPHILUS, Hampton, Middlesex.
 KING, KNOWLES, Caius College, Cambridge.
 MACAULEY, THOMAS, Leicester.
 MATTHEWS, WILLIAM CLARENCE, Longsight, near Manchester.

PAYNE, GEORGE BROWN, Knutsford, Cheshire.
 RUTTLEDGE, THOMAS EDWARD, London Hospital.
 SMITH, SAMUEL WAGSTAFF, Carnarvon.
 TEWAN, JAMES, Killeshandra, County of Cavan.
 THORNILEY, JOSEPH, Heaton Mersey, Lancashire.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise, April 30th, 1857.

BARNETT, LYSANDER HOOKER, Limehouse.
 BARR, WILLIAM ALEXANDER, Lewes, Sussex.
 KELLAND, CHARLES THEOPHILUS.
 MATTHEWS, WILLIAM C., Longsight, near Manchester.
 MAUGHAN, WILLIAM, Carnarvon.
 PAYNE, GEORGE BROWN, Knutsford, Cheshire.
 SMITH, SAMUEL WAGSTAFF.
 SMITH, JOSIAH SYDNEY, Tiverton, Devon.
 WATTS, ROBERT GEORGE, Clifton, near Bristol.
 WILSON, FREDERICK WILLIAM.

DEATHS.

BELLINGHAM.—At Borneo, April 25, J. F. Bellingham, Esq., at an advanced age, M.R.C.S. Eng. 1840, L.S.A. 1839.

BIRTWHISTLE.—April 29, at Skipton, in Craven, aged 51, William Birtwhistle, Esq., M.R.C.S. Eng. 1827, formerly in the E.I.C.S.

WRIGHT.—On the 4th instant, at the residence of his mother, New-walk, Leicester, Francis Wright, Esq., M.D. Edin. 1840, M.R.C.S. Eng. 1840, aged 41.

CENTRAL OPHTHALMIC HOSPITAL.—Mr. E. C. Hulme, F.R.C.S., has just been appointed one of the surgeons of this excellent institution.

ROYAL MEDICAL BENEVOLENT COLLEGE.—We are glad to learn that the Council of the Royal Medical Benevolent College have resolved to make an allowance of £10 a year each to all the Pensioners at the College, including those who are to be elected by the Governors on the 21st inst.

DR. TUXFORD AND THE DUCHESS OF GLOUCESTER.—The following paragraph has appeared in the daily papers relating to the late Duchess of Gloucester:—"Among the incidents of her royal highness's early life may be mentioned a romantic attachment entertained for her by Dr. Tuxford, a celebrated Physician of the last century, who, dying, bequeathed the illustrious object of his affection the whole of his fortune, amounting to upwards of £100,000 sterling." We have been assured on good authority that this is untrue, but that Dr. John Turton, who was Physician to the king, and lived in Adam-street, Adelphi, did leave a small legacy to the princess, which was never claimed, but went to the Doctor's family.

UNIVERSITY OF LONDON.—A meeting was held on Wednesday last at Burlington House, for admission to degrees, Earl Granville in the chair. A report was read by Dr. Carpenter, when the presentation for degrees took place. The name of the candidate to be presented having been read out, the gentleman appointed to present him addressed the Chancellor in these words:—"My lords and gentlemen, in the name of ——— College, I present to you [A. B.] to be admitted to the degree of ———." The names of gentlemen who obtained Medical Degrees follow:—John Hillier Blount, M.D., King's College; Frederick Robert Spackman, M.D., Middlesex Hospital; John White Keyworth, M.D., St. Thomas's Hospital; William Tiffin Iliff, M.D., Guy's Hospital; Henry Vandyke Carter, M.D., St. George's Hospital; Edwyn Andrew, M.B., University College; James Gibbs Blake, M.B., University College; Henry Maudsley, M.B., University College; John Charles Thorowgood, M.B., University College; Francis Joseph Dowling, M.B., King's College; James Rice, M.B., King's College; Edward Clapton, M.B., St. Thomas's Hospital; Sydney Jones, M.B., St. Thomas's Hospital; Thomas Edwin Burton Brown, M.B., Guy's Hospital.

Presentation for Honours and Prizes.—The graduates having been severally presented to the Chancellor, the presentation of Scholars, Exhibitioners, Medalists, and Prizemen, took

place. The names of all candidates who have obtained honours in the course of the past year were read; but those gentlemen only who have obtained Scholarships, Exhibitions, Medals or Prizes were presented to the Chancellor. The names of those who obtained Medical honours follow:—Henry Maudsley, M.B., University College, Scholarship and Medal in Surgery; Thomas Edwin Burton Brown, M.B., Guy's Hospital, Medal in Physiology and Comparative Anatomy; Henry Maudsley, M.B., University College, Medal in Physiology and Comparative Anatomy; Thomas Edwin Burton Brown, M.B., Guy's Hospital, Medal in Surgery; James Gibbs Blake, M.B., University College, Medal in Medicine; John Charles Thorowgood, M.B., University College, Medal in Medicine; Leonard Emanuel, B.A., University College, Scholarship in Mathematics; Walter West, B.A., King's College, Prize in Chemistry; Leonard Emanuel, B.A., University College, Prize in Animal Physiology.

First Examination.—John Langdon Haydon Down, M.B., London Hospital, Exhibition and Medal in Chemistry; Wm. Henry Broadbent, M.B., Royal Manchester School of Medicine, Exhibition and Medal in Anatomy and Physiology; John Langdon Haydon Down, M.B., London Hospital, Exhibition and Medal in Materia Medica; Josephus Alexander Williams, M.B., Queen's College, Birmingham, Medal in Anatomy and Physiology; Wm. Henry Broadbent, M.B., Royal Manchester School of Medicine, Medal in Chemistry; William Hodges, M.B., Guy's Hospital, Medal in Materia Medica; William Josiah Smith, M.B., St. Bartholomew's Hospital, Medal in Botany.

GROSVENOR-PLACE SCHOOL OF ANATOMY AND MEDICINE.—The Annual Meeting of this School was held on Tuesday, May the 1st, Alderman Salomons in the chair. After a few preliminary remarks by the Chairman, Dr. Lankester read the report of the School for the past year, stating that the tutorial system of teaching had been carried out more fully than before by the regular adoption of weekly oral, and monthly written examinations in each class. The result was considered as highly satisfactory, for although a fifth of the students who present themselves for examination in London are rejected, in no single instance has a pupil of this School been rejected at either College or Hall since the appointment of the present staff of teachers, although upwards of thirty gentlemen have received their diplomas during that period. After alluding to the courses of lectures on Military Surgery by Mr. Blenkins, Operative Surgery by Dr. Deville, and Public Hygiene by Dr. Richardson, to be delivered during the ensuing summer session, attention was directed to the announcement of an extra prize for general proficiency, in the shape of a valuable microscope, the gift of Alderman Salomons, which will be contended for at the end of this summer session. The following prizes were then distributed by the Chairman, who addressed a few appropriate remarks to each prizeman:—

Anatomy.—Lecturer, Dr. Deville. Gold Medal, Mr. A. J. Bannister; Silver Medal, Mr. J. Adsetts. First Certificate, Mr. R. W. Clifton; second Certificate, Mr. W. Millar.

Junior Anatomy.—Medal, Mr. A. Herzen; Certificate, Mr. E. Davies.

Physiology.—Lecturer, Dr. Lankester. Prize, Mr. Edward Cook; Certificate, Mr. R. W. Clifton.

Junior Physiology.—First Certificate, Mr. E. Davies; second Certificate, Mr. A. Herzen; third Certificate, Mr. H. Bucknill.

Practice of Medicine.—Lecturer, Dr. Ballard. Prize, Mr. Edward Cook. First Certificate, Mr. J. Adsetts; second Certificate, Mr. W. Lomas.

Surgery.—Lecturers, Mr. Spencer Wells and Mr. Adams. Prize, Mr. W. Millar.

Chemistry.—Lecturer, Mr. J. E. D. Rodgers. Prize, Mr. Edward Davies. Certificates equal, Mr. E. Bucknill, Mr. H. Bucknill.

Medical Jurisprudence.—Lecturer, Dr. Richardson. Prize, Mr. A. J. Bannister. Certificate, Mr. Thomas Goodrich.

Public Hygiene.—Lecturer, Dr. Richardson. Prize Mr. A. J. Bannister.

Botany.—Lecturer, Dr. Lankester. Prize, Alfred P. Dowson.

Practical Chemistry.—Lecturer, Mr. Rodgers. Prize Mr. A. J. Bannister.

Midwifery.—Lecturer, Mr. Bloxam. Senior Class.—Prize, Mr. A. J. Bannister. Certificate, Mr. R. W. Clifton. Junior Class.—Prize, Mr. W. Lomas. Certificate, Mr. E. Cook.

Materia Medica.—Lecturer, Dr. Ayres. First Prize, Mr. Edward Cook; second Prize, Mr. J. Adsetts.

Clinical Prize for Reports of Medical Cases in St. George's Hospital, Mr. Edward Cook. Clinical Prize for Reports of Surgical Cases in St George's Hospital, Mr. W. Lomas.

The Chairman concluded the proceedings by an address which, with a vote of thanks from the students to the teachers, proposed by Mr. Bannister, and seconded by Mr. Pope, in effective speeches, terminated the proceedings amid loud applause.

UNIVERSITY COLLEGE.—PRIZES, &c. OF THE FACULTY OF MEDICINE.—The result of the examinations of classes at the close of the Winter Term was announced on the 1st inst. as follows:—

Anatomy.—Professor Ellis.—Senior Class—Gold Medal and 1st Certificate, Richard William Garnham, of Upper Holloway; 1st Silver Medal and 2nd Certificate, 2nd Silver Medal and 3rd Certificate, William Edward Allen of York. Certificates of Honour.—4, Henry James Alford, of Taunton; 5, Augustus Mawley, of London; 6, George Hare Philipson, of Newcastle-on-Tyne.—Junior Class—Silver Medal and 1st Certificate, F. William Gibson, of Plymouth. Certificates of Honour.—2, Simon Belinfante, of Holland; 3, Arthur Charles Gaye, of Minehead, Somersetshire; 4, Thomas Charles Kirby, of Bodicot, Oxfordshire.

Anatomy and Physiology.—Professor Sharpey, M.D.—Gold Medal and 1st Certificate, Felix H. Kempster, of London; 1st Silver Medal and 2nd Certificate, Leonard Emanuel, of London; 2nd Silver Medal and 3rd Certificate, Eustace Smith, of Leamington. Certificates of Honour.—4, William Edward Allen, of York; 5 (equal), Samuel Hoppus Adams, of Bedford, Richard William Garnham; 7, Alexander P. Dowson, of Geldeston, Norfolk.

Comparative Anatomy.—Professor Grant, M.D.—Gold Medal and 1st Certificate, A. Osmond Black, of London. Certificates of Honour.—2, William J. Beaumont, of London; 3, Rajendra Chandra Chandra, of Calcutta.

Surgery.—Professor Erichsen.—Gold Medal and 1st Certificate, Thomas Hawkins, of Spaldwick; 1st Silver Medal, George E. Jeaffreson, of Framlingham, Suffolk; 2nd Silver Medal and 3rd Certificate, Volcy Pougnet, of Mauritius. Certificates of Honour.—4, George Farr White, of London; 5 (equal), George Hare Philipson, Rajendra Chandra Chandra; 6, Jeremiah Moulten Donne, of Castle Cary, Somersetshire; 7, Charles Edward Prince, of Balshaw, Cambridgeshire.

Medicine.—Professor Walshe, M.D.—Gold Medal and 1st Certificate, William G. Groves, of Devon; 1st Silver Medal and 2nd Certificate, Albert Buchanan, of London.

Dr. Fellows' Medico-Clinical Medal.—Examiners, Professors Parkes, Walsh, and Garred.—Gold Medal, David Richards of Llandoverly.

Chemistry.—Professor Williamson, F.R.S.—Gold Medal and 1st Certificate, Francis D. Harris, of London; 1st Silver Medal and 2d Certificate, Sydney Ringer, of Norwich; 2d Silver Medal and 3d Certificate, Isidore B. Lyon, of Edinburgh. Certificates of Honour.—4, Albert Warren Leachman, of London; 5, Henry S. Tabor, of Bocking, Essex; 6, Francis Cook Matthews, of London. Birkbeck Laboratory Students.—Gold Medal and 1st Certificate, Owen Crofton, of Roscommon, Ireland; 1st Silver Medal and 2d Certificate, Francis C. Conington; 2d Silver Medal and 3d Certificate, Henry Henwood, of Stockbridge. Certificates of Honour.—4 (equal), William Vaughan Russell, of Leamington, Edgar Eldred, of Dublin, George Hopper, of Durham; 5, John Davis, of London; 6, Samuel Hughes, of Liverpool; 7, William Martin, of Edinburgh; 8 (equal), William Chard, of Wells, William Carling, of London.

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL.—The distribution of prizes for the session 1866-7 took place on Friday afternoon, in the board-room of the institution, the Right Hon. Lord John Russell, M.P., in the chair. Dr. Pitman, lecturer on *Materia Medica* in the Hospital, introduced to the noble chairman the students to whom the prizes had been awarded, and gave a brief history of the hospital, from the time when it was founded as an infirmary, now 140 years ago, down to the present date. The following gentlemen were the successful candidates for the prizes:—Mr. James Collyer, the £30 exhibition (given only to students of the first year), also the prize for *Materia Medica*; Mr. Edward Harding, Sir Charles Clarke's prize for good conduct, and the prizes for

the practice of medicine and the practice of surgery; Mr. R. L. Bowles, Sir Benjamin Brodie's prize, and the first Chambers prize; Mr. Charles Roberts, the Bishop of Bath and Wells' prize for microscopical pursuits, and the prize for chemistry; Mr. Ed. Fox, the second Chambers prize; Mr. Edward Walker, Mr. Lewis Powell's prize for dissection; Mr. A. Mosely (senior class), and Mr. F. T. White (junior class), anatomy; Mr. C. H. Fox, physiology and botany; Mr. G. F. Cooper, practical chemistry; Mr. Henderson, midwifery; Mr. H. Hett, the second prize for *Materia Medica*; Mr. E. D. Tomlinson, medical jurisprudence. Certificates of honour were also awarded to Messrs. J. Eaton, J. Collyer, C. Roberts, Ash, Rogers, G. Harrison, J. A. Bright, F. T. White, G. D. Tomlinson, E. D. Tomlinson, Henderson, G. F. Cooper, and H. H. Parry. After the distribution of the prizes and certificates of honour the chairman addressed a few words of counsel and encouragement to the students, and the company separated after a vote of thanks, on the motion of Sir Benjamin Brodie, had been given to his lordship for his kindness in presiding.

SALE OF RARE BOOKS AND MANUSCRIPTS.—During the past week, an extraordinary collection of rare and curious books and manuscripts was submitted to the hammer by Messrs. Sotheby and Wilkinson, and realized prices worthy the most absurd period of bibliomania. The following were the only medical works. We think it very doubtful if £590 was ever given before for a medical work. *Dioscoridis Opera*. Manuscript of the 12th century, on vellum, with numerous paintings of the plants, animals, &c.—a most beautiful specimen of Byzantine calligraphy and art; £590. *Lopez Villalobos, Sumario de la Medicina*. Printed at Salamanca in 1498, and extremely curious as being the earliest work printed in Spain in which any notice is taken of the *Morbus Gallicus*; £7 2s. 6d.

HEALTH OF ENGLISH FARMERS.—The Registrar-General says, in the last quarterly report:—"English farmers and their families enjoy many sanitary advantages; yet they suffer from the heaps of manure which surround their houses. Young farmers of the age of 25 to 35 die at the rate of 10 in 1000 annually, which is a slightly higher rate of mortality than is experienced by shoemakers, carpenters, bakers, grocers, miners, blacksmiths, at that period of life. Farmers in the subsequent ages of life enjoy superior health, and after 35 live 33 years on an average, as they then become less sensible to zymotic influences; which, however, prove fatal to their children and their cattle. The cattle are exposed to the additional risk of drinking impure water, which recent experience has proved is often fatal; for many of the unscientific farmers in the country still allow the putrid ammoniacal fluids to stray into the roads, or into the ponds where the cattle drink; although, as the late Principal Harris acutely once remarked, this is about as rational as to retain the grains for use after brewing, and to allow the strong ale to run away to waste."

ADVANTAGES OF THE STUDY OF BOTANY.—The following sensible observations were made by Dr. Cobbold, in his introductory lecture at St. Mary's Hospital, on the 1st of this month. "To be unacquainted, by sight even, with many of our indigenous plants possessing medical virtues, is at once to delegate much of your authority to the abettor of quackery. The botanical impostor who would assume your place may be profoundly ignorant of the mode of using the catheter, and may not appreciate the varied characters of a respiratory murmur; nevertheless to the unlearned, to those educated in ignorance, and to the prejudiced against legitimate practice, he displays his botanical medicines by advertisement, and in his shop-window the herbs themselves. If you were to look in at the windows of some of these quacks, you would perhaps expect to see, in all their familiar outlines, many of the products in our Pharmacopœia. Here and there you may recognise an official species, but the majority of those dried bunches of weeds are from common plants growing in the immediate neighbourhood of the town, and which if not long ago abandoned from the Pharmacopœia, are now scarcely ever used in ordinary medical practice. Allow me to tell you that some of these despised weeds, not retained in the Pharmacopœias because better foreign substitutes are known, possess valuable medicinal virtues, and although in most cases misapplied, do now and then, accidentally it may be, effect some curative good. At all events you will be occa-

sionally consulted about the employment of domestic infusions made from such weeds, and if on exhibiting the herbs you are unacquainted with either their name or properties, you once more delegate to the enemy a decided advantage."

PRIZE QUESTION.—The Société Médicale des Hôpitaux de Paris, which consists of the Medical Officers of the Civil and Military Hospitals, has proposed a prize of 1500 francs, to be adjudged in 1858, to the author of the best memoir on "Sanguineous Congestions in Fevers," the MSS. to be addressed to M. Roger, Secrétaire, before December 31, 1857, 15, Boulevard de la Madeleine.

ASSASSINATION OF A MEDICAL MAN BY A LUNATIC.—Dr. Geoffroy, of Avignon, and Chief Physician of the Asylum at Vacluse, has just been killed by a patient during a visit he paid to him. An epileptic patient, concerning whom no distrust whatever was felt, inasmuch as he was mild and obedient during the lucid intervals, and manifested great attachment to M. Geoffroy, complained to him of a pain in his leg. While the Physician was stooping down to examine the part, the wretched man plunged a pair of strong scissors (he being a tailor by trade), that he had in his hand, into his side. Death speedily followed. M. Geoffroy, a person of considerable wealth, attended the Asylum out of pure benevolence, and has died universally deplored.

THE CHINESE POISONED BREAD.—The Berlin Correspondent of the *Times*, writing on the 2nd of May, says:—"I mentioned to you recently, that some portions of the poisoned bread which had nearly produced so much mischief at Hongkong, has been forwarded to Baron Liebig, at Munich, for analysis. The sample forwarded to him consists of two oblong loaves that have been baked in a mould, probably a tin form. They have been enclosed in a tin case, hermetically soldered, but, owing to the bread having been put up in a moist state, the loaves were covered with a thick mould by the time they arrived. The analysis made by Baron Liebig leaves no doubt that arsenic was the poisonous ingredient used on that occasion, and, moreover, every portion of the bread, crust and crumb, contains that poison so thoroughly and so equably distributed, that most undoubtedly it must have been kneaded into the dough, if it were not even originally mixed with the flour. According to one analysis, 50 grammes of bread contained 260 milligrammes of arsenic, which, in 1lb of 500 grammes, would give from 38 to 39 grains of our apothecaries' weight; according to another, the 1lb of bread yielded 2.8 grammes, or 42 grains of arsenic. The quantity here found is evidently quite enough for all lethal purposes, supposing the whole quantity of arsenic thus introduced into the stomach became at once active; by its intimate mixture with the bread, however, it was brought into contact with the coats of the stomach, or introduced into the secretions only gradually, according as the bread itself was digested: the vomiting, caused by the first gradual exhibition of the arsenic in very minute quantities, was the means of preventing the remaining larger quantities, already received into the stomach, from producing the result intended by the perpetrator of this wholesale crime. The samples of bread are understood to have been forwarded to Munich by some of the persons whose lives were thus endangered, and who were not satisfied with the results obtained in the examination of February 15."—[The writer has made a mistake in his estimate of the *gramme*. A *gramme* is only 15 grains, not 20.]

RADCLIFFE INFIRMARY, OXFORD.—A Special General Court was held April 30, to consider certain statements that had appeared regarding the finances, and the supply of surgical instruments; when the explanations respecting the former were declared satisfactory, and the following resolution was passed as to the latter:—"That with regard to the statements made as to the supply of surgical instruments, this Court have satisfied themselves, by the most searching inquiry, that there is no foundation for such a charge, and that no application for surgical instruments, within at least eight years, has been refused."

MONSTROSITY.—On the 11th ult., a woman residing at Brockmoor, near Brierly-hill, was delivered of two dead children with instruments, by Messrs. Onions and Cooke, Surgeons. The children had grown together, and were united at the lower part of the stomach. The other parts of their bodies were quite distinct and separate. One of the children was considerably larger than the other. The mother is doing well under the care of the above gentlemen.—*Wolverhampton Chronicle*.

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 2, 1857.

BIRTHS.

Births of Boys, 896; Girls, 894; Total, 1745.

Average of 10 corresponding weeks, 1847-56, 1565.1.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	535	503	1038
Average of the ten years 1847-56 ... ..	...	...	1046
Average corrected to increased population	...	...	1151
Corrected average for corresponding week in ten years 1847-56	529.0	516.7	1045.7
Deaths of people above 90	3	3	3
Deaths in 13 General Hospitals	30	18	48

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population. 1851.	Small-pox.	Measles.	Scarlatina.	Hoop- ing- Cough.	Dia- rrhoea.	Ty- phus
West	376,427	..	2	1	14	3	1
North....	490,396	..	5	4	6	1	6
Central ..	393,256	..	13	2	13	1	4
East	485,522	1	12	4	17	6	9
South	616,635	..	4	6	10	3	16
Total..	2,362,236	1	36	17	60	14	36

DEATHS REGISTERED DURING THE WEEK.

CAUSES OF DEATH.		In the Week ending Saturday, May 2, 1857.						Averages of Temperature and Deaths in 10 Weeks.
		Deaths of Persons.						
		AT ALL AGES.	Under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.	At 80 Years of Age and Upwards.	
Mean Temperature		41° 5						47° 1
ALL CAUSES	1038	501	146	161	177	38	1045.7	
SPECIFIED CAUSES	1017	498	145	160	176	38	1036.6	
DISEASES:—								
1. Zymotic Class	193	159	9	13	10	2	218.8	
2. Dropsy, Cancer, and others of uncertain seat	50	6	8	12	22	2	44.6	
3. Tubercular Class	201	71	86	37	6	1	199.9	
4. Of Brain, Nerves, etc. ..	102	42	5	17	30	8	120.4	
5. Of Heart, etc.	31	2	5	12	10	2	42.7	
6. Of Respiratory Organs ..	177	101	7	28	36	5	173.3	
7. Of Digestive Organs	73	33	7	21	11	1	59.6	
8. Of Kidneys, etc.	16	..	4	5	7	..	11.5	
9. Of Uterus; viz. — Puer- peral Disease, etc.	8	..	5	1	2	..	8.2	
10. Of Joints, Bones; viz.— Rheumatism, etc.	7	1	2	3	1	..	9.0	
11. Of Skin, etc.	4	3	1	..	..	..	2.3
12. Malformations	6	6	..	..	..	..	3.5
13. Debility from Premature Birth, etc.	26	24	..	2	..	..	26.0
14. Atrophy	46	34	..	3	9	..	23.3	
15. Age	45	..	..	..	29	16	45.2
16. Sudden	10	7	2	1	..	..	8.1
17. Violence, Privation, etc. ...	22	9	4	5	3	1	30.2	
CAUSES NOT SPECIFIED	21	3	1	1	1	..	9.1	

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29.912 in.
Mean temperature	41.5
Highest point of thermometer	59
Lowest point of thermometer	29.1
Mean dew-point temperature	35.0
General direction of wind	N.E.
Whole amount of rain in the week	0.00
Amount of horizontal movement of air in the week	395 miles.

BOOKS RECEIVED.

- On Diseases of the Liver. By George Budd, M.D., F.R.S. Third Edition. London. 1857.
- The Ophthalmia of Ireland. By J. Williams, A.B., etc. Dublin. 1857.
- Third Report of the Postmaster-General. London. 1857.
- Nashville Journal of Medicine and Surgery. Nashville. April. 1857.
- The North American Medico-Chirurgical Review. Philadelphia. March. 1857.
- Tables by the Swedish Calculating Machine. London. 1857.
- Report on the Sanitary Condition of St. Mary, Newington. By W. T. Iliff, M.D. London. 1857.
- The Climate of the Crimea. By W. R. E. Smart, M.D. London. 1857.
- Diététique des Enfants. Par L. W. Mauthner. Vienna. 1856.
- Guide to Poole. By P. Brannon. Poole. 1857.
- The Wave Theory of Light. By H. Lloyd, D.D. London. 1857.
- Fifth Annual Report of the Poor-law Commissioners in Ireland. Dublin. 1857.
- The Causes and Prevention of Diseases. By S. Fenwick, M.D. London. 1857.
- Cases of Paraplegia. By W. Gull, M.D. London. 1857.
- Photographic Chemistry. By T. F. Hardwich. Fourth Edition. London. 1857.
- The History and Statistics of Ovariectomy. By G. H. Lyman, M.D. Boston. 1856.
- A Practical Treatise on Hip-joint Disease. By W. C. Hugman, F.R.C.S. London. 1856.
- The Cattle Plague and Diseased Meat. Second Letter to Sir G. Grey. By J. S. Gamgee. London. 1857.
- Notes on Belgian Lunatic Asylums. By John Webster, M.D., F.R.S. London. 1857.
- Surgical Cases. By G. H. Gay, M.D. Boston. 1856.
- Report on the Sanitary Condition of the Parish of St. Luke, Chelsea. By A. W. Barclay, M.D. Chelsea. 1857.

TO CORRESPONDENTS.

- A. B. says, "The Trade and Navigation Returns give only about 62,000lb as the quantity of opium annually imported to the United Kingdom for home consumption."
- J. S.—There are many excellent openings in Canada for Medical men.
- Dr. Little's interesting case of the cure of subclavian aneurism by manipulation shall appear next week.
- A Constant Reader, Bath.—We are not disposed to discuss the questions.
- Mr. C.—We do not insert notices of marriages in the *Medical Times and Gazette*.
- Mr. E. H.—The use of diluted red precipitate ointment in the treatment of pityriasis capitis is so well known that it is hardly necessary to publish the letter. The addition of cod-liver oil or glycerine to the ointment must be unimportant.

JOHN BOYD, ESQ., M.P. FOR COLERAINE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Your Coleraine correspondents, under fictitious signatures, have taken considerable pains to enlighten you on the Medical non-qualifications of their representative, known in Ireland and in London as Dr. Boyd.—"Once a lieutenant always a captain," is a trite observation.

It is true that Mr. Boyd had at one time a Medical establishment in Coleraine; but he very soon turned his talents, energies, acute perceptions, and accurate observing powers to a better purpose; and having acquired a large property in the town of Coleraine, in which, I may say, he was reared, and where he has many friends and is very popular, he has been returned as M.P. for the ancient borough.

Whether possessed of a Medical qualification or not I will not stop to inquire; but I am sure the Profession will find him very accessible, and ready to use his influence in the House of Commons on their behalf for all reasonable purposes.

In your editorial note of the 2nd you say, Dr. Boyd was fined twice by the Irish Apothecaries' Company for keeping a shop without their license. He is not the only instance in Coleraine of the kindness of the Hall (if he was fined, for I never heard it before).

In 1840 the Irish Apothecaries' Company prosecuted and fined four Medical Practitioners in Coleraine for keeping shops, and then examined and licensed them to keep shops.

I will return to this proceeding of the Hall.

I am, etc.

M. P. H. BABINGTON, M.B.

13, Pump-street, Londonderry, May 4, 1857.

Rusticus.—The youth must be bound for five years, in order to fulfil the legal requirements of the Act of 1815; but he may spend a part of that time, or the whole of it, if he pleases, in attending lectures and Hospital practice.

Medico-Chirurgus, Carlisle.—The Summer Session of the Medical Schools in London commences on the 1st of May, and terminates on the 31st of July. The Winter Session in London commences on the 1st of October, and terminates on the 31st of March.

A Botanist.—The Garden at Kew contains an extensive series of Medical plants, arranged in their orders. The admission to the Garden is gratuitous.

Inquirer.—We have received the printed circulars, and we regret to find that the author is a duly-qualified practitioner.

A Pupil, Liverpool.—In order to graduate at the University of London, it is absolutely necessary to pass the Matriculation Examination. There is no exception to this rule, except in the case of those whose studies began, or were completed, before the opening of the University.

Mr. Barnett.—We cannot blame the practitioner in question for refusing to meet a Homœopath in consultation; on the contrary, we deem it to be the duty of the members of our Profession to discountenance in every way the infinitesimal quackery.

A paragraph has appeared in the *Court Journal* contradicting our statement that Sir Charles Loeock and Dr. Snow had been sent for by a common cab when required to attend the Queen in her recent confinement. The *Court Journal* has probably been instructed by some of the people about the Palace, who are to blame for the neglect, as we gave an exact account of what took place, namely, that a very shaky cab first went for Dr. Loeock, drove him to the Palace, and then went off for Dr. Snow.

Mr. Rumball shall receive a private reply.

COMMUNICATIONS have been received from—

Mr. FERGUSSON; Dr. SNOW; Dr. LITTLE; Dr. SIEVEKING; Dr. COSTELLO; Mr. HAYNES WALTON; SECRETARY GENERAL, BOARD OF HEALTH; Dr. COBOLD; Mr. FERNIE; Dr. LANKESTER; Mr. SLIGHT; Mr. RIVERS; Mr. J. CARRUTHERS; THE REGISTRAR-GENERAL, Edinburgh; Mr. FOWLER; M. PRETERRE; Mr. BROWNING; Mr. MONTEMALI; Mr. PARKER; Mr. COTTON; J. D.; Dr. SHARPE; Mr. C. BENNETT; Mr. HADEN; Mr. BOWMER; Dr. WALKER; Mr. E. MOORE; Mr. J. BUCKTON; Mr. E. F. WESTON; Mr. J. W. WILLIAMS; Dr. R. CROTHERS; Dr. WIEHE; Dr. J. A. GRANT; Mr. R. FREEMAN; Mr. F. FERGUSON; Mr. FREEMAN; Mr. M'DERMOTT; A RECENT SUBSCRIBER; Mr. MAYSMOR; Dr. O'CONNOR; Mr. WILLIAMS; Mr. GEORGE; Mr. RUMBALL; Mr. NEIL; Dr. MCWILLIAM; Mr. ADAMS; Mr. BARNETT; INQUIRER; RUSTICUS; A BOTANIST; Mr. E. LONG; Mr. T. FOULKES; Mr. H. LONDON; Mr. A. D. GULLAND; Mr. TOMLINSON; Mr. F. FERGUSON; Dr. HAYDON.

APPOINTMENTS FOR THE WEEK.

9. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; Westminster, 1 p.m.; King's, 2 p.m.; Charing Cross, 1 p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m.: Dr. Edward Smith, "On the Throat, in Chronic Phthisis and Chronic Bronchitis."

ROYAL BOTANICAL SOCIETY, 3½ p.m.

ROYAL COLLEGE OF SURGEONS, 4 p.m.: Mr. Prescott Hewitt, "On Traumatic Inflammation of the Brain and its Membranes."

11. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.; Orthopaedic Hospital, 3 p.m.

12. Tuesday.

Operations at Guy's, 1 p.m.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m.: Dr. Sieveking's Analysis of 52 Cases of Epilepsy, observed by himself; Mr. Giles, "On the Treatment of Wounds of the Palmar Arches by forced Flexion of the Arm;" Dr. Markham's "Case of Disease of the Heart, with extreme Dilatation of the Auricles," which will be read if there is time.

ROYAL COLLEGE OF SURGEONS, 4 p.m.: Mr. Prescott Hewitt, "On Chronic Hydrocephalus."

ROYAL INSTITUTION, 3 p.m.: Dr. Lacaita, "On Italian Literature—The Cinque-cento; Lorenzo de' Medici; Poliziano; Ariosto."

13. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopaedic Hospital, 3 p.m.

NORTH LONDON MEDICAL SOCIETY, 8 p.m.: Mr. Gamgee, "Medico-legal Reflections on Injuries of the Head."

MICROSCOPICAL SOCIETY, 8 p.m.

ETHNOLOGICAL SOCIETY, 8½ p.m.

14. Thursday.

Operations at St. George's, 1 p.m.; Middlesex, 12½ p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.

ROYAL SOCIETY, 8½ p.m.

ROYAL COLLEGE OF SURGEONS, 4 p.m.: Mr. Prescott Hewitt, "On Hydrocele, or Watery Tumour of the Head."

ROYAL INSTITUTION, 3 p.m.: Professor J. Tyndall, "On Sound, and some associated Phenomena."

15. Friday.

Operations at the Moorfields Ophthalmic, 10 a.m.; Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8½ p.m.: Professor T. H. Huxley, "On the Present State of our Knowledge of the Structure and Functions of Nerve."

James's Powder.—Physicians and other Medical Practitioners having complained of the frequent use of Antimonial Powder, instead of the genuine "James's Powder" prescribed, have represented to Messrs. Newbery, that the price of the powder has greatly led to this fraudulent practice, and has also greatly prevented the more general use of the powder. Messrs. Newbery have therefore yielded to the suggestions of the Profession, and have reduced the price; and, to secure the use of the genuine medicine, recommend that the same should be prescribed as prepared by Messrs. Newbery—thus, "Pulv. Jacobi Ver." (Newbery's.) The price for dispensing will henceforth be reduced from 21s. to 9s. an ounce. The genuine has the name, "F. Newbery, 45, St. Paul's Churchyard," engraved on the Government Stamp.

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and Co.,) 67, St. James's-street, beg to call the attention of the Medical Profession to their Registered MERCURIAL VAPOUR-BATH, for the Treatment of Syphilitic Affections, &c., (see the "Lancet," March 14th,) as used at St. George's, the Westminster, King's College, the Lock Hospital, the Hospital for Children, and by many professional gentlemen.



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And also to their Registered SELF-ACTING ENEMA SYRINGE, so much approved of, (see "Lancet," March 28th,) and which can be used with the greatest ease and convenience with one hand only, an object of some moment to Invalids. Nipple and Stomach Pumps on the same self-acting principle.

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½ oz. moulded phials ..	4s. 6d. do.
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ORIGINAL LECTURES.

SUBSTANCE OF A CLINICAL LECTURE

ON

FETID BRONCHITIS,

WITH DISCOVERY OF BUTYRIC ACID IN THE SPUTA.

By PROFESSOR LAYCOCK,

OF EDINBURGH.

(Reported by Mr. LOW, Clinical Clerk.)

Cases of fetid bronchitis—Butyric acid and butyrates the cause of the odour.—Connexion of the peculiar sputa with cerebral phenomena.—Successful administration of strychnia; and also in tubercular bronchorrhœa.

A case of fetid bronchitis, under the care of Dr. Laycock, in the clinical ward of the Royal Infirmary, has attracted some attention from the discovery of the cause of the odour in this disease, and the rapidity with which, apparently, it yielded to strychnine.

Oliver Scott, aged 37, single, by trade a tailor, residing in the Canongate, admitted February 17, 1857.

Patient is 5 ft. 6 in. in height, well formed and tolerably robust. Has the appearance of having been very stout, but the muscular system is now flabby. Diathesis, lymphatic; hair dark; features broad and massive; forehead prominent; conjunctivæ anæmic; eyes grey; nose short and thick, alæ nasi expanded; malar bones not prominent; upper lip tumid; mucous membrane of lips and gums pale; teeth small and regular, enamel good. Voice hoarse and whispering; breath gives off a peculiarly fetid odour. Sternal end of left clavicle is higher than the right; manubrium sterni depressed. On left side there is a prominence of the third and fourth ribs at their junction with the cartilages. Abdomen rather large and flabby.

History.—Is one of a large family, seven of whom, viz., four brothers and three sisters, are dead. Does not know of what diseases they died. Patient states that in his youth he was very healthy and temperate. Until the age of twenty-five years he followed the occupations of a tailor and a hawker, which he relinquished at this time for that of a beershop-keeper. For five years subsequently he continued well, and though indulging occasionally in liquor was not, he considers, on the whole, intemperate. Being unfortunate in this line of business, he was compelled to sell his house and resume his prior occupation of hawking. Owing to the depression resulting from his misfortunes, he became very intemperate, and five years ago had a severe attack of delirium tremens, for the treatment of which he became an inmate of the Infirmary. After remaining there a month, he was discharged, and he returned at once to his habits of dissipation. Twice subsequently, while in a state of intoxication, he received injuries on the chest, which caused the alterations in its form above noticed. In other respects he continued well until a year ago, when he had a second attack of delirium tremens, and was again an inmate of the Infirmary for eight days.

The present illness commenced three months ago, after exposure to severe cold and wet. The first symptom noticed was a troublesome cough, which, however, was unattended by pain or expectoration. This continued until two months ago, when, after repeated exposures to cold and wet, it became more urgent, though still without pain, and with only slight expectoration. Between three weeks and a month ago, the cough increased in violence; there was severe pain in the left side, and the sputa was streaked with blood. He noticed now, for the first time, that his breath was very offensive. Since that time the cough has continued unabated; the pain in his side is much increased, and the sputa have been occasionally tinged with blood.

He has not been under Medical treatment. Has had no feverishness or thirst from the commencement of the present attack, until four days ago. States that he has lived well

during the past seven years. Feels tolerably well, except as to the cough.

Examination on admission.

Respiratory System.—Thoracic expansion is somewhat restricted. The sternal end of the left clavicle is dislocated; manubrium sterni depressed, and the prominence of third and fourth ribs appears to have resulted from an old fracture.

On percussion, anteriorly, the right side of the chest is resonant, as also the upper two-thirds of the left side; the lower third is dull both anteriorly and laterally. On auscultation over right side, inspiration is found to be harsh, expiration prolonged. On the left side, inspiration is sibilant, expiration prolonged and attended by fine moist crepitation superiorly, but over lower third, by loud snoring. Posteriorly, percussion is normal. The respiratory sounds are slightly exaggerated on both sides and at the base of left lung there is fine crepitus with expiration. The cough is very troublesome; sputa copious (about a pint in twenty-four hours), mucopurulent, viscid and fetid, but much less so than the breath; some of the masses are tinged with blood. No lung substance is observable under the microscope; but there are abundant pus-globules.

Digestive System.—Tongue furred and moist. Patient complains of great thirst. There is no hepatic or splenic enlargement discoverable on percussion. Bowels open.

Genito-urinary System.—Urine, sp. gr. 1.032; deposits a copious sediment of urate of ammonia and purpurates. Chlorides abundant.

Circulatory System.—Cardiac dulness two and a half inches transversely at nipple; impulse felt between fifth and sixth ribs. There is a slight blowing murmur at the close of systolic, heard at the apex. Pulse 68, full and firm.

All the other systems normal.

Feb. 17th. Pulse 80, full; skin hot and dry. On right side of the chest the respiratory murmurs are harsh, and with forced expiration, snoring. On the left side the respiratory sounds have the same character, but to a greater degree. Posteriorly, forced respiration is harsh on right side; and on left there is snoring with both respiratory acts.

Tongue furred; thirst excessive.

18th. To take the following mixture:—℞. Naphthæ medicinalis, ʒii. Liquoris morphinæ muriatis, ʒiii. Aquæ destillatæ ad ʒvi.—℞. Ft. mistura cujus sumat ʒss., ter quotidie.

Vespere.—On the right side the sounds are unchanged; but on the left there is sibilus anteriorly, with inspiration and expiration, and fine crepitus at the close of the latter. Patient continues very thirsty. Pulse 80, full. Patient expectorates about a pint in twenty-four hours. Makes no complaint.

19th. No sibilus on left side.

20th. Considerable pain over lower third of left side. To have a blister applied to the seat of pain.

21st. Pain much diminished. Patient is still very thirsty. Sputa increased in quantity.

22nd. The pain has quite gone. On percussion the dull sound is more marked over lower third of left side. Over the same region, posteriorly, the crepitant râle is still heard.

23rd. The crepitus previously heard over left side anteriorly, is no longer present. There is no sibilus on either side, and over the whole front the respiration is not snoring, although it is harsh. Pulse 60, soft and rather feeble. Sputa much increased, (two pints in twenty-four hours.) Exhales an odour resembling that of May flowers. Breath still very fetid; the odour is rather feculent than gangrenous.

25th. Had a return of hæmoptysis to-day at 2 p.m. The sputa were deeply covered with blood. Patient had no pain, and at 7 p.m. the hæmorrhage ceased. Expresses himself as feeling well in other respects. The snoring and crepitus have returned on the left side. Posteriorly, over lower half of left side, there is coarse crepitus with both respiratory acts. Pulse 60, very feeble. Appetite good; thirst diminished. Add five minims of tinct. ferri sesquichlor., to each dose of the mixture.

March 2nd. On auscultation a fine moist crepitation is heard, with inspiration over the whole back. There is no dulness on percussion, although the tone is rather flatter than natural. Vocal resonance everywhere increased.

5th. For the last three days patient has been sitting up for about three hours daily. Sputa as copious as before. Still no complaints. Ordered to omit the other remedies and take one-thirtieth of a grain of strychnia every eight hours.

9th. No crepitus on right side. The breath is not nearly so offensive. Patient feels considerably stronger, and sits up for five or six hours daily. Increase dose of strychnia to one-twentieth of a grain.

March 10.—The sputa this morning were slightly tinged with blood. The cough was very urgent, but patient had no pain. Continued same treatment.

19th.—Strength increasing. Sputa diminished in quantity, and since last report have been occasionally tinged with blood. The fragrant odour has entirely disappeared, and the breath has almost lost its fetor.

24th.—The dulness over the lower third of left chest is still present; there are yet crepitations remaining over the corresponding region posteriorly. The expectoration has very much decreased; the sputa amounting to only half a pint in the day, contain but very few traces of blood.

27th.—The cough is now very slight; sputa measure only 2 oz. per diem. Patient is gaining flesh rapidly.

April 2nd.—The improvement continues; sputa only 1 oz. in last 24 hours, viscid and free from blood.

Dismissed. The expectoration had wholly ceased.

The fetid sputa were examined in the chemical laboratory of the University by the kindness and under the superintendence of Professor Gregory, and the odour was found to be due to the presence of methylamine with butyric and acetic acids.

Comment.—Dr. Laycock remarked that the case would formerly have been regarded as an example of pulmonary gangrene, but it resembled in the leading symptoms the class of cases known as fetid bronchitis. In one point, however, only, is there a resemblance to pulmonary gangrene, namely, in the stench of the breath and of the sputa. In the fetid bronchitis the odour is not that of putrid flesh, but very characteristic of butyric acid, and the new odorous compounds, the butyrates of ethyl, now used to flavour confectionery. In the case of Scott the odour was that of the May-flower, or of apple-blossom, with a conjoint odour—a sort of *arrière goût* of fæces.

Scott's case showed other interesting characteristics. First, there was the excessive thirst, out of all relation to the febrile or general disturbance, and referrible probably to lesion of the nervous system—a polydipsia to be attributed to functional disturbance of the pneumogastric centre. Secondly, there was the sensorial hebetude, as indicated by the feeling of well-being and content which the patient always manifested. No feeling of illness, and especially nothing referrible to the lungs was complained of. This is a condition analogous to that observed in certain cases of phthisis. Thirdly, in the history there was the repeated occurrence of delirium tremens, and the morbid state of the encephalon to be estimated consequent upon it, and upon the continued drunkenness. Dr. Laycock, therefore, concluded that the production in the lungs of the peculiar compound to which the odour of the sputa was due, might be referred to some change in the ganglia of the pneumogastric and of the sympathetic in connexion with the pulmonary mucous surface, of an asthenic character. He said he was led to this view by the result of the experiments of Claude Bernard, who had discovered that the irritation of the floor of the fourth ventricle, or, in other words, of the origin of the pneumogastric, was followed by the appearance of sugar in the urine. However the production of sugar in the organism may be explained theoretically, the facts indicated that the pneumogastric ganglion or the nerve tissues near it and in anatomical relation with the pneumogastric nerves, exercised an action on the blood as it passed through the lungs, so that the organic compounds contained in it would be abnormally altered when abnormal action was set up in them. Hence Dr. Laycock prescribed strychnia in the case of Scott, hoping thereby to modify the state of the nerve-centres, upon which probably the production of butyric acid and the butyrates depended.

As a further illustration of the pathology of fetid bronchitis, and the probable connexion of the special symptom with a morbid condition of the cerebellum, Dr. Laycock called the attention of the class to the following case:—

Case of fetid bronchitis, with aortic insufficiency and dilatation, pulmonary condensation and softening; and atrophy and softening of the left lobe of cerebellum.

John Edgar, 66, single, following the occupation of a carter, admitted into the Royal Infirmary, May 28th, 1856. The most salient and interesting points in this case are as

follow:—The patient enjoyed good health up to the time of present attack, which commenced six weeks ago, with rigors and slight dyspnoea, followed by thirst, feverishness, and cough. Subsequently he lost flesh; the cough became more violent; and was attended by copious expectoration of fetid matter.

On admission, a bulging was found over the cardiac region. Percussion sounds rather flatter over left apex than right, anteriorly; otherwise normal; at the same point respiration is exaggerated; expiration prolonged. Posteriorly mucous râles are heard at left base and over middle third, on forced inspiration. Expectoration abundant, partly purulent, with very offensive odour. Over the base of the cardiac organ a murmur is audible with the diastole; it is heard also at the xyphoid cartilage and second right costal cartilage, but faintly at the apex. The arteries at the wrist are very tortuous; the pulsation of the arteries in both arms and forearms, as well as of both carotids, can be distinctly perceived. Pulse 88.

June 4.—Patient has not improved much. Complaints of thirst, and a little pain in left infra-mammary region. Expectoration more abundant and purulent. Skin hot and dry.

June 11.—“A little improvement;” appetite good; skin cool; that covering the face of a yellow tint; abundant moist râles over whole of left side, posteriorly; vocal resonance increased; percussion equal on both sides. 24th.—The odour of breath and sputa less offensive; the sputa less abundant; still muco-purulent; appetite much improved. 29th.—Coughed up a teaspoonful of florid blood; small quantities continued to be expectorated during the day; sputa frothy. 30th.—The fetor of sputa is gone to-day, and no odour is perceptible in the breath. Dulness on percussion over left apex, anteriorly, extends down to second rib; cardiac dulness cannot be ascertained, that portion of the chest being as resonant as elsewhere; a murmur with the first sound is audible at the apex, also at base over sternum and under both clavicles. On percussion over left lung, posteriorly, the upper two-thirds are found to be duller than on the right side; lower third is resonant; the colour of the face is less sallow, and patient expresses himself as somewhat stronger.

15th.—The dulness on the left side extends below the nipple, anteriorly and laterally. Respiration over the dull region is tubular; towards the lower part it is faint, and inspiration is attended by a sub-crepitant râle. At the base friction-sounds are audible. Vocal resonance muffled. The sputa pretty abundant; the upper part is frothy and white; in one or two places fawn-coloured; somewhat fetid; the lower part is muco-purulent and tenacious. Second cardiac sound is rough and prolonged; over the sternum both sounds have a metallic character. Pulse 92, full and regular. Patient does not think himself in any way worse, except as regards the cough; skin has a more decidedly icteric tint since last report; conjunctivæ slightly yellow.

21st.—No change in physical signs, except that a cracked-pot sound is elicited, on percussion, over second and third ribs on the left side. Sputa retain their fetor, which is of a feculent character. Patient is gradually getting weaker, though he says there is no change. The yellow tinge of the skin has been diminishing for a few days past, and the lips have acquired an anæmic paleness. *Vespere.*—Complains to-night of pain in the left chest. Empl. cantharid. to be applied to the seat of pain.

23rd.—The pain is gone. Patient has had one or two severe head-aches, with sickness, which lasted for a day, and disappeared before night without interference.

27th.—Sputa contained a good deal of blood yesterday. To-day the fetor is considerably diminished.

August 1.—The blood has been gradually disappearing from the sputa. There is now a mere streak in one or two places. The fetor is much less.

7th.—Much more blood has appeared in the sputa for the last two days, and this morning it is much increased. It is bright red, and comes up in mouthfuls. Heart's action rather stronger than usual; there also appears to be a slight murmur, with the second sound, at the base.

8th.—Got up to stool this morning about seven o'clock, and was found unable to get back again; was lifted into bed; pulse by no means very weak, 84 per minute. He said he had no pain, and could not tell what was wrong. Had some ammenia and brandy administered to him, but did not improve. Continued much the same throughout the day. In

the evening seemed to be quite sensible, but could not speak distinctly. Pulse full, 96 per minute.

9th.—The pulse somewhat weaker, 104 per minute. At nine a.m. in the forenoon was apparently sensible, but could not articulate. His tongue lay to the right side in his mouth, but could be moved about easily when he tried. Pulse getting weaker and rather quicker. About five p.m. had a convulsive fit, in which his right side was alone affected, the arm and leg violently, and the mouth being drawn to the right side, without foaming. He had six similar ones before half-past eight p.m., in all of which the right side was most affected, but in the last the left was considerably affected also. About nine p.m. he had one in which the left arm and leg were violently convulsed, and the right hand, but not above the elbow. The mouth was at first drawn to the left, but, during the fit, changed to the right, and continued so until the fit ended. The pulse was almost gone, and he seemed nearly asphyxiated, but whenever the convulsions ceased the pulse began to gain in power, and very soon was nearly at its former strength, and 104 per minute. He had four other fits before midnight, at which time (being unable to swallow) he had brandy and an enema of beef-tea administered. From that time till nine a.m. next morning, August 10th, he had sixteen other fits. This morning he lies on his back, breathing with some difficulty. Pulse 120, weaker. At ten a.m. he had a final fit, a very violent one, in which the whole body was convulsed. After this he lay on his back, breathing with difficulty and stertorously, until about 5.30 p.m., when he died quite quietly.

Setio Cadaveris on the 12th of August, forty-five hours after death.—The body was not emaciated to any great extent. The skin of the face of a dusky yellowish colour, which did not, however, extend to the integument of any other part of the body. On removing the cranium the brain was seen to present a very uniform smooth appearance, owing to an effusion, partly serous, partly gelatinous, on the surface of the hemispheres. The brain itself was somewhat oedematous, and very soft; the lateral ventricles were rather enlarged, and contained about an ounce of fluid. The arteries at the base of the brain were very atheromatous, especially the right middle cerebral and the left inferior cerebellar, which last was completely occluded about an inch from its origin. The left lobe of the cerebellum was both softened and atrophied, and, under the microscope, was seen to be crowded with exudation-corpuscles. The *Pericardium* contained a good deal of serous fluid. The *Heart* itself was quite healthy, with the exception of a slight incompetency of the aortic valves, caused by a swelling, about the size of a pea, between two of them. The *aorta* was dilated and rough immediately above the valves, and was, to a slight degree, atheromatous. The *Left Lung* was adherent to the ribs, especially posteriorly, where the adhesions were quite cartilaginous, and nearly an inch thick. The upper lobe was completely consolidated, with an exudation of a simply fibrous character. No trace existed of either cancerous or tubercular deposit. In the centre of the lung there was a fetid, disintegrating cavity, about the size of a walnut. The *Right Lung* was very oedematous, especially in the upper lobe, with some pneumonic consolidation, and a few emphysematous patches along the anterior border. The *Liver* was normal; the *Gall-Bladder* elongated, with an hour-glass contraction in the middle. *Kidneys* contained a few cysts. *Supra-Renal Capsules* rather larger than natural, but normal in structure. *Spleen* normal. *Testes* the same. All the arteries in the body, as far as they were examined, presented here and there patches of atheromatous deposits.

Dr. Laycock pointed out the points of similarity between this case and that of Scott. The leading symptoms were the same, but in Edgar they occurred in a man much more advanced in years, and with much more extensive structural disease. In Edgar there was the same recurrent hæmoptysis, offensive breath, and fecal or butyric sputa. There was also the same cachectic character, excessive thirst, and sensorial hebetude. The latter symptom was, indeed, so decidedly marked, that Dr. Laycock diagnosed obscure disease at the base of the brain from the first admission of the patient. His general morbid condition was, in fact, such that considerable mental depression and irritability is almost always experienced, unless special centric causes are in operation to diminish the sensorial sensibility of the cerebral centres subservient to the feeling of corporeal well-being or ill-being (according as the

bodily states vary), and which Dr. Laycock places in the posterior portion and the base or the encephalon. He therefore diagnosed probable disease of the cerebellum or medulla oblongata in the case of Edgar, before any special symptoms involving the motor system showed themselves.

Functional disturbance of the nerve-centres in relation with the lungs may, however, be associated with butyric or fetid expectoration in bronchitis. In proof of this Dr. Laycock called the attention of the class to the following case, observed by him twenty years ago, and reported in the *London Medical Gazette* for December, 1837.

III.—*Case of Fetid Bronchitis: the Bronchorrhœa and Fœtor occurring in Tertian Paroxysms, with convulsive Cough.*—A young woman, aged 20, the wife of a Hospital Serjeant in a cavalry regiment, admitted April 27, 1837, into Hospital. She is pale, and has an anxious expression of countenance. She suckled her first child for twelve months, and weaned it six weeks ago. Milk can still be squeezed from the nipples. Complains of violent cough attacking her in paroxysms, which continue for from fifteen minutes to two hours, causing great pain in the head, and accompanied by a profuse expectoration of a muco-purulent fluid, having a distinctly fecal and highly offensive smell. "Bronchophony at each upper and anterior region of the chest, most marked on the right." Pulse 80, feeble. Bowels constipated; tongue clean and moist; appetite impaired and fastidious; thirst excessive, the patient drinking two or three gallons of fluid every day. Temper irritable and desponding.

Her *history* was, that in January preceding she was attacked with pain under the right scapula, extending round and over the lateral and anterior region; it was aggravated when she coughed or breathed, catching her suddenly. She was relieved by bleeding, and suffered from nothing more than a slight cough until April 17 (ten days before admission). She was exposed at that time to cold and fatigue, and had causes of anxiety, and thereupon the pain recurred, extending round to beneath the right mammae. She had daily pyrexial paroxysms, commencing about noon, but not terminating in sweat. Her cough became more severe, and on the seventh day of the attack she observed that the sputa had a most disagreeable smell, which gradually became more perceptible, and at last highly offensive.

On watching the case in the Hospital, it was found that cough and expectoration came on in tertian paroxysms. She would expectorate, in the course of two hours, from two to three pints of a dirty grey muco-purulent fluid, of a peculiarly offensive fecal odour, and which filled the whole ward, tainting the atmosphere so that it resembled that of a privy. The cough was convulsive, like that of whooping-cough, the breath smelling like the sputa. In the intervals (that is, on each alternate day) the sputa much less in quantity, having more the odour of a decayed apple, and represented by the patient as of a sweetish taste. The thirst was so urgent, that she had a gallon pitcher of water, acidulated by nitric acid, placed by her bedside for use *ad libitum*. She left the Hospital, still suffering from attacks, but she soon afterward made rapid progress to recovery, and joined her husband at Nottingham (to which place his regiment had removed) in good health and spirits.

This case, Dr. Laycock remarked, was analogous to the preceding. There was the same characteristic sputa, the same broncho-pneumonia, the same excessive thirst. But the symptoms implicating the nervous system were those rather of irritability than paralysis; the cough was convulsive, the temper irritable; cephalœa during the paroxysms. The difference might in a great degree be attributed to the youth and more temperate habits of the woman; partly, perhaps, also to the action of the malaria to which she had been exposed, and which impressed the production of butyric acid with a periodic character. In this respect the case was analogous to those on record of tertian diabetes.

The beneficial action of the strychnine seemed to be well-marked in the case of Scott. With the view, however, of testing its efficacy as a bronchial astringent, it has been administered in some cases of phthisis with profuse expectoration, in which there was the hopefulness which characterises certain cases, and with the same apparent benefit; the amount of sputa having markedly diminished. Dr. Laycock is of opinion that a participation of the nervous system, in certain morbid pulmonary states, will be found to be of much more frequent occurrence than is even suspected at present.

ORIGINAL COMMUNICATIONS.

ARMY MEDICAL REPORTS.

(SELECTED, BY AUTHORITY OF THE DIRECTOR-GENERAL, FROM DOCUMENTS IN THE OFFICE OF THE ARMY MEDICAL DEPARTMENT.)

No. XXX.

Extracts from Memoranda issued by the Director-General for the Guidance of the Principal Medical Officer of the Force proceeding to China.

[The articles omitted refer merely to details of duty not interesting to the general Professional reader.]

1. On your arrival at Hong Kong, you will immediately ascertain what quantity of medicines and stores of every description, required for sick, are at the station, and also what accommodation the Hospital Ship "Hercules" will be able to afford, beyond what is likely to be required for the sick of the garrison.

2. You must, in concert with the principal Medical Officer now at Hong Kong, make arrangements for the storage of large supplies of medicines, instruments, surgical appliances, and Medical comforts, which you may expect to arrive almost simultaneously with the troops. A portion of these stores, which will not be immediately required for the Hospital Ships, will, it is presumed, be advantageously deposited at Victoria; and in that case, they must be so arranged in storehouses as to admit of the articles which may from time to time be required being easily obtained without having to disturb others not wanted.

3. In addition to the stores at the General Depôt, there must also be supplies of considerable extent on board each of the Hospital Ships, from which all that may be required for the Regimental Hospitals may be easily obtained whenever necessary. In the principal Hospital Ship should be stationed, if possible, the Apothecary and Senior Purveyor, who must be held responsible that an ample stock of all that may be required shall be always ready for issue, and in order to insure that, they must be careful to make frequent demands on the General Depôt, to replace whatever may be issued for the general service.

5. You must at once issue stringent orders that no article demanded be refused on a plea that it is not in store, at least until that has been positively ascertained to be the case,—replies to the above effect were not unfrequently made at Scutari and Balaklava, in order to escape the trouble which a prolonged search for articles demanded, owing to the want of facilities which existed there, for the proper arrangement of stores. A systematic classification of stores is most essential, and if that be once effected, no difficulty will be experienced in furnishing whatever may be available.

7. A small steamer will, I expect, be placed at your disposal, for the purpose of conveying stores, from where they are deposited, to where they may be required, and also for the removal of sick, when, such may be necessary, as also for the conveyance of yourself or the Staff-Surgeons of the 1st Class, on their inspectorial duties. This steamer must be regularly fitted up for the accommodation of sick, and should be properly supplied with a double awning, and all kinds of stores likely to be wanted, when she is employed on such service. A Medical Officer should be specially detailed for this vessel, if practicable, as greater advantages will result from the services of one accustomed to the duty than from one less conversant with it.

8. After you take your place with the Force, you must require that a state of the health of the troops in each ship be sent to you daily, or as often as practicable, which should include such details as will enable you to rightly understand the state of health of the force, and the necessity which exists for any special interference on your part, or on that of the Staff-Surgeons of Brigades.

10. The vessels you may require to engage for Hospital Ships should be large, high between decks, and with ample means of ventilation. Immediately they are hired, they must be cleared between decks, and the latter should be open from stem to stern, and no cabins or bulkheads, or other hinderance to free ventilation, should be allowed to exist. The berths or the reception of the sick should be properly fitted, not less

than two feet apart, and the bedding and utensils usually required should be immediately placed in their proper positions, and the full number of attendants put on board. The fittings of each vessel must be completed under the superintendence of the Staff-Surgeon of the 2nd Class, detailed for duty in her; and each must also, while that is proceeding, be from time to time inspected by yourself and the Staff-Surgeons of the Brigades.

11. Each vessel should be supplied with means for lifting sick from a boat into the ship, and also for lowering them into the sick bay.

12. Each regiment is provided with a pair of panniers and a small leathern case, in which a variety of useful medicines and appliances are contained—the latter can be easily carried, slung over a man's shoulder, and this, with a basket or havresack containing instruments, will, in all probability, suffice for all that may be required for any temporary movement of a small force on shore. For a larger, it will be necessary to have the large panniers, which, in the absence of horses, will require to be suspended to poles, and carried by natives. A proportion of Medical comforts will also require to be carried in the same manner, and small packages of these, of the kind most essential, should always be ready prepared for any immediate demand.

14. The Staff Medical Officers, and others for duty on board the hospital ships, should at once be detailed, and the Senior Staff-Surgeons of the 2nd Class should be immediately put in charge, and required to report to you, as often as practicable, the state of the vessels and the condition of the sick.

The men of the Medical Staff Corps, viz., 5 stewards, 12 assistant stewards, 2 wardmasters, 12 assistant wardmasters, 3 cooks, and 166 first and second class orderlies, should also be distributed among the ships in which it may be thought best to employ them, and the Medical Officers and others should be informed the duties they are to discharge.

15. When troops are to be employed on shore, and when the sick and wounded are to be directly conveyed to regimental hospitals, or hospital ships, a Staff-Surgeon of the 2nd Class should be stationed at the place where they will be embarked, and a regimental or assistant Staff-Surgeon be in each boat intended to convey them to the vessels in which they are to be placed; and in these boats they should proceed and deliver them over to the Medical Officers on board, and then return for what more may have arrived in the interim.

16. As outbreaks of cholera at sea, as well as on shore, may fairly be expected, and also numerous cases of other complaints of the bowels, the supply of medicines necessary to the treatment of such diseases should always be possessed in abundance, and ready for immediate issue. Any Medical Officer who proves neglectful in this respect must be considered unfitted for the appointment he holds.

17. Whenever troops disembark for active operations, they should always be accompanied by a full supply of doolies, bearers, and bheasties well provided with good water—that obtained from rivers is generally objectionable; therefore, if a supply cannot be secured pure from springs, such as has been previously boiled should be preferred.

18. Affections of the head are very liable to occur to men employed on shore during the hot months. Scarcely had the 98th regiment landed before forty men were carried to the hospital, the majority in a state of insensibility, five of them with marked symptoms of phrenitis; all these died. This tendency to head affections, as well as other circumstances, will justify Medical Officers urging on Officers in command not to carry on active operations during the very hot period of day.

19. On troops being landed, care should always be taken by the Medical Officer or Officers who accompany them, that each man has his field dressing, and whenever a regiment requires a fresh supply of these, application must be made to the Quartermaster-General's Department.

21. When troops require to advance inland to a distance too great to permit of sick or wounded being at once sent back to the coast, the 1st Class Staff-Surgeon must, if practicable, select a suitable building for their lodgment, and if such cannot be secured, a Hospital marquee, one or two of which ought to accompany the force, should be employed; on such occasions, water-proof bottoms should always be used, and also, if possible, cork mattresses.

22. A native should always accompany the non-commissioned Officer detailed to look after the sick, and should carry

in a haversack, or basket, some brandy, wax candles, a box of lucifer matches, a few torches, and any other small article likely to be suddenly required on the line of march.

24. Medical Officers should furnish an account of the country through which any corps or detachment they accompany may march, describe the roads, the character and supply of water, and the houses which are suited for the accommodation of sick.

25. The time troops are likely to be employed inland must always, if possible, be ascertained before they leave the vessel, in order that due provision may be made in regard of medicines, Medical comforts, tentage, etc.

26. You must constantly bear in mind that requisitions for supplies must be made in time—never forgetting that six months at least will elapse between the dispatch of the requisition and the arrival from this country of what you require.

27. At all times a full supply of whatever is likely to be required for sick should be on board each ship; but immediately before the commencement of the north-east monsoon a much larger stock should be on hand, as, during its prevalence, supplies, assuming they will be required from Hong Kong, will not be procurable with the same facility as at other times.

28. The unavoidable waste of medicines, etc., which always occurs during a period of active operations in the field, must always be considered in providing the supplies to accompany a force to be so engaged.

29. When a force is to be landed, either yourself or one of the Staff-Surgeons should ascertain by personal inspection, that everything likely to be required for sick or wounded is provided in abundance.

30. When troops are likely to be engaged, a proportion of Medical Officers should always be at hand, to afford the assistance which may be required, as well as to expedite and otherwise direct the removal of wounded to the place where they will be properly attended to, which must always be selected before the action commences.

31. Twelve carpenters of the Medical Staff Corps are included in the detachment which accompanies the expeditionary force, for the purpose of being employed when necessary on board the Hospital Ships; and three sets of tools have been provided for their use.

32. One of the Staff-Surgeons, if practicable, but if not, a careful and zealous Staff-Surgeon of the second class, should be appointed to inspect all Transports to be employed in the conveyance of sick or invalids, and be held responsible that each is suited for the purpose for which she is to be used, and that an ample supply of every article likely to be necessary is on board, and that nothing exists to render it probable those embarked in her will be exposed to any undue sufferings or privations. This Officer must be supplied with blank forms, in which he may record all the information necessary to be furnished.

37. Medical Officers should constantly keep in recollection the probability of scurvy appearing, notwithstanding the men may be furnished with a fair amount of fresh meat and vegetables. Any symptom, indicating the presence of this disease, or even of a tendency to it, should be considered a sufficient reason to warrant an issue of lime-juice.

38. Should cholera unfortunately occur, care must be taken to ascertain if the men who may suffer from it had diarrhoea, even to the slightest possible extent, or but for a few hours previously to the invasion of the more serious symptoms.

40. The boats to be used for the transfer of sick and wounded should be of considerable size, furnished with an awning, a platform, a few cork mattresses, and some blankets; they should also contain a supply of medicines, water, medical comforts, etc.

41. The Officer who will accompany the force in the capacity of pathologist (a), must perform, as far as practicable, the *post mortem* examinations; he must be granted every possible facility for the discharge of the important duty which is to be entrusted to him, and he must record distinctly and fully all diseased appearances which shall be discovered in each subject. In the event of his not being always required for the purpose for which he has been engaged, he may be employed in professional attendance on sick. A supply of the instruments necessary for his use, has been furnished, and also a set of meteorological instruments.

(a) Dr. Carl Becker is the Pathologist appointed to the Expedition.—Ed.

43. All sanitary measures which you may consider to be necessary to the interests of the troops, you must submit for the consideration of the General Officer in command, and if any hesitation or disinclination to enforce them should be evinced, you must earnestly but respectfully represent the advantages to be expected from their adoption, and the disadvantages likely to arise from their omission.

44. Washing machines for use on board the Hospital Ships have been provided, and also a proportion of marine soap, in case it shall not always be practicable to command a supply of fresh water.

46. Should it be considered desirable to seek a sanatorium nearer than Australia, the physical character of the locality, though highly important, should not alone be considered; the nature of the climate, and in what respects there is reason to believe it will be more conducive to health, or to the restoration of health lost in China, must also be points for serious consideration.

47. As a very considerable number of natives of India will, in all probability, be attached to the force, and as many of them will likely suffer from disease, and as it will not be practicable to mix them with the sick of the troops, some means for their accommodation will be required, and which, perhaps, will only be found by engaging a small ship for their use.

51. Should any circumstance render an addition to the Medical Staff desirable, you must report, by the first mail, and state the number of officers you consider to be required, and of what grades.

55. The Hospital Ships should be so moored as that the prevailing winds may be made to contribute efficiently to their ventilation. Punkahs should also, if practicable, be secured, and Dank's rotatory ventilating machines, four of which have been forwarded, will be found very useful and effective whenever it may be found necessary to employ them.

56. An abundant supply of chloride of zinc, and a fair quantity of chloride of lime and of charcoal should be in each vessel, and chloride of lime should frequently be cast into the privies, and freely sprinkled on the sides of the pans through which the feculent matter has to pass; these pans should also be cleansed, at least twice, daily, by casting buckets of water into them.

57. The lower decks should not be washed oftener than is absolutely necessary, particularly during the monsoons; dry rubbing may be made to answer all necessary purposes. This practice should not simply be observed in Hospital Ships, but should also be extended to those in which regiments are embarked.

58. Great care must be taken that the hold of the ship is properly kept, that no undue accumulation of bilge-water be permitted, and should the latter when pumped out have a particularly offensive smell, or be more than ordinarily discoloured, an immediate examination should be made with a view to detect the cause, and when detected, a remedy must be applied, and chloride of lime sprinkled wherever it may appear to be required.

59. No washing of clothes nor any other article must be tolerated between decks, nor wet articles dried there.

60. Men in health should be required to rise early, and the bedding, of every description, should be soon afterwards placed on deck, all the ports opened, and sources of ventilation resorted to, in order to get rid of all impure air. The ports should be kept open till sunset at least, should no reason to the contrary exist.

61. A third of the troops on board should always be on deck during the night, and should be kept on foot and in motion as much as possible, and no man should ever be allowed to lie down and sleep; during the day the majority, if practicable, should be on deck.

62. The dew during the night being generally heavy, the awnings should either be kept up, or the men on deck should wear their great coats.

63. A full supply of buckets should be available to draw water for purposes of ablution; the fore-castle should be properly fitted up for this process, and the men should be protected from the sun by a sail or awning.

64. Should it be found necessary to encamp troops for any length of time, the site should, if possible, be changed weekly, and the tents should, when possible, be placed on rising ground, and away from cultivation, especially if irrigation be practised. The neighbourhood of low marshy ground must

also be avoided, and pools of stagnant water, if any exist, should be immediately drained.

65. Besides the various deodorizing agents with which the expedition is provided, you should have in each ship the ordinary means of fumigation, in case it should be considered necessary to resort to that process in addition to other means.

66. When the bilge-water of a vessel generally emits offensive exhalations, chloride of lime may be cast into the well at night with advantage.

67. The men should be given to understand, that prolonged constipation of the bowels is disadvantageous to health, especially in tropical climates, and they should be encouraged, when such arises, to apply for the means to relieve it. They should likewise be warned of the danger of disregarding diarrhoea, and required to report its occurrence, and on their doing so, not a moment should be lost in placing them under medical treatment.

68. Personal cleanliness must be ensured, frequent change of under-clothing required; and care must be taken, should men get wet, that they change their clothes as soon as practicable.

69. The troops in each vessel should be inspected daily by a Medical Officer, with a view to observe the state of their health.

70. No partitions or curtains should be permitted between decks, nor any accumulation of articles calculated to interrupt the free circulation of air.

71. Cleanliness should be enforced throughout every camp, and the latrines should, if the wind at the period is known to prevail from any particular quarter, be placed to leeward of the tents, and the ordure should be covered once, if not twice, in each day with a thin layer of earth.

72. The means of regularly amusing and exercising the men while on board, should, if possible, be provided; and they should be encouraged to take advantage of whatever opportunities may be offered.

73. Should biscuit be issued for the use of the troops, it will be necessary to have it frequently inspected, in order to see that it is of good quality, and not mouldy, nor infected with animalcules. During the last war in China a considerable amount of disease was said to have been occasioned by the consumption of bad biscuit.

74. Care must be taken that the men are not allowed an amount of food greater than is conducive to health; overloading the stomach, particularly in warm climates, being calculated to injure health, and has often been found to do so in the case of sailors.

75. The Hospital ships should on no occasion be overcrowded; hence, whenever there is reason to expect that such is likely to occur, means should immediately be taken either to add to the number of ships, or remove a portion of sick to the sanatorium, should one have been selected.

76. In the event of ordinary fresh water not being procurable in sufficient quantity, and it be necessary to resort to distilled water, the latter should be used for culinary purposes only, as it has, by experience, been found, when used as drink, to increase thirst.

77. Great care must be taken that the food to be consumed by the sick be of good quality, and that fresh or preserved meat be invariably furnished to such as are allowed animal food. Your attention should be given to the kitchens, and care must be taken that every vessel in which sick is accommodated have the cooking utensils necessary to admit of the food for the sick being properly prepared. The supply of water must also be always sufficient and of good quality.

82. River water, if used as drink, is more liable to prove injurious than spring water; therefore, should it be necessary to encamp men, every endeavour must be made to find a spring yielding sufficient for at least drinking purposes. Water not quite pure may be improved, by suspending in it, by a thread, a small piece of alum.

83. The diet of the men should be varied as much as possible, and arrangements should be made to have established cooks, instead of daily, weekly, or monthly ones. The same articles should not, if possible, be issued two days successively. It will be a question whether soup should be much used.

86. Visceral disease, the consequence of periodic fevers, will soon, in all probability, present itself, and along with it dropsy, especially of the lower extremities. The 98th Regiment had not been many months in China before many cases of the kind were under treatment.

87. Ulcers during the last war in China were disposed to assume a sloughing character; Medical Officers must, therefore, be prepared for this occurrence, and must be well provided with the most approved remedial agents for such complaints.

89. When a body of troops are about to proceed on service up any of the rivers, they should have quinine administered to them before they leave the ship, and daily, while absent. This practice has been found most advantageous when sailors have been required to ascend the rivers of Western Africa. In the Navy they administer it in a ration of wine.

CASES OF BONY CYSTS OF THE LOWER JAW, IN WHICH AMPUTATION OF THE DISEASED PORTION OF BONE WAS PERFORMED. (a)

By ROBERT ADAMS, M.D.

Surgeon to the Richmond Hospital, Dublin.

Case 2.—Multilocular Bony Cyst of the Lower Jaw, with Fluid Contents.—Amputation of the Diseased Portion.—On Saturday, February 21, I detailed to the Society the history of a case of bony cyst of the lower jaw which had solid contents; and I gave an account of the operation had recourse to for the remedy of this disease. To-day (March 14) it is my intention to follow up the subject of bony cysts of the lower jaw by the relation of a case in which the contents of the cyst were fluid. Although it is now some years since the subject of this observation was under my care in the Richmond Hospital, yet, as our Museum contains drawings and casts showing the condition of the jaw at the time of this patient's admission, and as the portion of the amputated bone, as well as drawings exhibiting the recent appearances the bony cyst presented, have been preserved, I feel I can lay the case as satisfactorily before the Society to-day as if it had occurred but yesterday; and here let me observe, that if, on the one hand, this case may fail to excite the degree of interest which usually attaches to recent examples of disease and the operations undertaken for them, on the other hand, the report of it should, in my opinion, be considered as more valuable because many years have elapsed since the amputation of the morbid portion of the lower jaw was performed, and there has been no return of the disease, a circumstance affording us the best proof that the nature of the case was benign.

William Dunne, aged 36, carpenter, a native of the north of Ireland, was admitted on the 14th of December, 1842, under my care, into the Richmond Hospital. He sought advice on account of a tumour, the size of a hen's egg, which occupied the right side of the body of the lower jaw, extending from a point behind the socket of the second incisor, near to the alveolus of the third molar tooth; in fact the swelling viewed externally seemed to extend from the symphysis near to the angle of the lower jaw. It projected but little to the inside of the bone, but externally it caused considerable prominence of the lower part of the cheek. This tumour, which was almost entirely covered by the mucous membrane, was uneven as to its surface, and under firm pressure proved very elastic. The most prominent points were the softest. The first molar tooth had been removed, and its socket was filled up to the level of the adjoining teeth by an extension of the tumour, which was here covered by healthy mucous membrane. The second molar tooth and the two bicuspid were loose. He suffered almost constantly from a dull aching pain in the tumour, which seemed to extend down to and include the lower margin or basis of the jaw. His general health was excellent. He stated that he felt as if the affected part were weak, and it seemed from his own account as if an instinctive consciousness of this weakness rendered him cautious in chewing solid substances; his words were, "that he felt as if the bone would snap if he were to attempt to crack any hard body with his teeth." The patient stated that the disease was of three years' duration, and that he knew of no cause to which he could attribute its origin; that it first

showed itself as a firm tumour, of a small size, on the outside of the gum, near to the first molar tooth. For some time after its first appearance the disease progressed but very slowly, but after the expiration of eighteen months the first molar tooth became loose, and the patient now, for the first time, experienced a painful aching sensation in the jaw. The loose tooth was extracted and the tumour continued to extend itself; subsequently the most prominent part of the swelling was punctured, and a thin serous and bloody fluid was given exit to, with some relief to the patient. The opening thus made did not close for some time, and the patient could by pressure empty the cavity of the swelling of its thin serous contents, observing, at the same time, "a yielding of its walls, giving him the idea as if he were pressing on a thin shell." One year before admission he observed the tumour began to project slightly inwards towards the tongue. The teeth adjacent to the one which had been removed now became loose, and the aching pain more constant and more severe.

Finding the disease thus increasing, he consulted my friend Dr. McDowell, of Monaghan, who advised him to place himself under my care in the Richmond Hospital, which he did accordingly. At a full consultation, the removal of the portion of the lower jaw, which included the tumour, was decided upon, as the only operation suited for this case, which was accordingly performed by me on the morning of the 22nd of December.

The second incisor and the third molar teeth, on the right side, were removed, to leave space for the action of the chain-saw on each side, beyond the limits of the disease. The incisions through the lip by the knife, and through the alveolar socket by the chain-saw, were performed in a similar manner to that which many students here present have seen lately adopted in the former case of Macdonnell; but, as the tumour was smaller, the operation was by so much the less severe in this case of Dunne, which we are here describing.

Considerable constitutional disturbance immediately followed on the operation, which had been necessarily a very painful one. The most prominent symptoms, three hours after it, were—extreme mental depression and despondency, frequent sighing, prostration of strength, with a weak, slow, and intermitting pulse. He had no sleep on the night succeeding the operation, but sat up constantly in bed, from a feeling of suffocation being induced whenever he attempted to lie down. Drinks were given to him (in the usual manner after such an operation), conveyed through a gum elastic tube.

On next day, Friday, the same nervous symptoms were present, but in a mitigated degree. Anodynes had procured him some rest, but it was not until Saturday, the third day, the effects of the shock of the operation had completely passed away. The incision through the lip united by the first intention, and was healed on the third day; when the hare-lip pins were withdrawn, the remainder of the wound suppurated. In a week after the operation the patient left his bed, and his former cheerfulness returned, and from this period the

progress of the case towards complete recovery was very rapid; in four weeks the wound was completely cicatrized, with but little deformity.

February 9.—Six weeks and a half after the operation, he felt himself so perfectly recovered that he left the Hospital for the country.

The portion of the lower jaw which was removed was about two inches in length, and measures an inch and a half in depth. The tumour (as seen from this cast taken of it) had somewhat of a globular form, but projected more on the external side, towards the cheek, than internally towards the mouth; it was elastic, and yielded to the pressure of the fingers. On even the external view of the portion amputated it was evident it consisted of a multilocular cystic tumour, for the mucous membrane which covered it was here and there raised up into small, little-rounded eminences, the size of peas. Some were double, a few were of a purple colour, a hue which dissection proved to have been derived from coagulated blood and coloured serum, which some of the thin transparent bony cells contained. When the mucous membrane was removed, and the whole tumour subjected to further dissection and maceration, it was found that the bases (Fig. 1, D) of the lower jaw (a thin shell of which alone remained), was the only portion of bone which had not been much encroached upon by the disease. The tumour itself was found composed of bony cells, of a texture as fine as those of the ethmoid bone.

The cells generally were of such a size as each might be capable of receiving within it a garden-pea. They communicated with each other, and amounted to no less than twenty-six in number. They were all lined by a pulpy, very red, vascular membrane, (as delineated in the drawing I present,) and contained an albuminous fluid, tinged of a reddish colour, apparently from blood held dissolved in it.

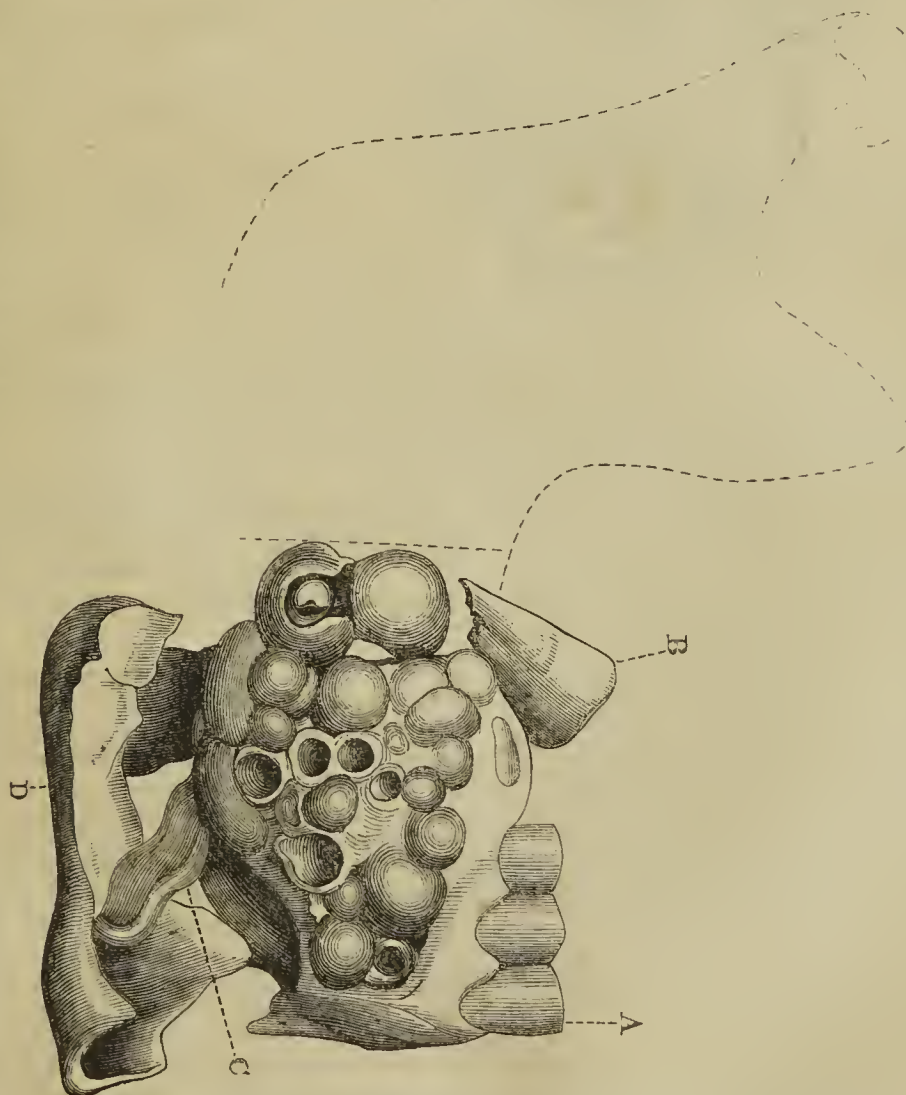
The inferior dental nerve (Fig. 1, C) and vessels were found placed beneath the lowest part of the cystic tumour; indeed, the superior wall of the dental canal had been absorbed, and

was thus converted into a gutter or groove, in which the dental nerve lay. The branches which had run from the trunk of the nerve to the lower point of the fangs of each tooth could not be traced through the morbid mass, and were most probably destroyed. The roots of the teeth were widely separated from the nerve by the interposition of the whole of the cystic tumour. In short, the trunk of the inferior dental nerve exposed in its canal seemed to have been compressed between the lowest part of the cystic tumour which overlaid it, and the hollow of the upper part of the basis (Fig. 1, D) of the lower jaw, a remnant of which still existed.

There were two circumstances in the history of the case, we may remember, to have been much dwelt on by the patient himself, for which this part of the anatomical examination of the disease suggests to us a plausible explanation:—

1st. The instinctive fear the patient had that the bone should give way when he was chewing a hard substance,

FIG. 1.



A. Canine. B. Second molar. C. Anterior portion of dental nerve. D. Remains of the basis of horizontal branch of jaw excavated on its upper surface, on which lay the tumour.

might have had a material foundation in the very slender condition and reduced state the horizontal ramus of the jaw had been found in; and secondly, that the dull aching so much complained of was due to the lesions the dental nerve and its branches were proved by dissection to have been subjected to.

In concluding this account of the case, it may not be unprofitable here to observe, that as we now know that this was a case of bony cyst of the lower jaw, of a nature clearly benign, it should be a subject for reflection with us whether we might not have attempted the removal of the bony cyst by means of the knife and the gouge, and without using the saw, or interfering with the remnant of the horizontal ramus of the lower jaw, with which the bony cyst was connected below; for my part, however, I feel persuaded, that had we removed the tumour merely, without having had recourse to the amputation of a portion of the basis of the lower jaw itself along with it, that we should have been ultimately disappointed; for it is manifest that any operation for the removal of the tumour alone could not have been effected without the necessary sacrifice of the dental nerve and accompanying vessels, lesions almost certain to have been succeeded by necrosis, or caries of the jaw.

As the local disease was far advanced, I believe it was better for the patient that he should have undergone at once the more complete operation, than that he should have been subjected to the milder expedient, which might not have proved so effectual, of having the bony cyst gouged out of the jaw, an operation certainly less severe than that actually performed, but one which, equally with it, would have involved the sacrifice of the alveolar border of the right side of the jaw, which had contained seven of the teeth; that is to say, all those at this side, from the second incisor to the last of the molars inclusively.

In conclusion, I may here mention that I saw Dunne nine years after the operation, and he had no return whatever of the disease, nor as there anything singular in his appearance. The notes I have entered in my case-book on this occasion are:—"The amount of deformity which in this case remains after the operation is really very trifling; it is true that the separated portions of the lower jaw, although reunited to each other by a firm ligamentous tissue, do fall in somewhat, so that when the mouth is fully shut the lower teeth do not exactly meet those of the upper jaw as formerly, but rather pass behind them. Scarcely any trace of the vertical incision through the lip can be seen, and the remainder of the cicatrix shrunk in below the ordinary site of the basis of the lower jaw is invisible.

The patient does not complain of any inconvenience, except that he must use only one side of the jaw in mastication.

Mr. Cusack, in a very valuable memoir he has written many years ago, on amputations of portions of the lower jaw (b),

among other examples of disease of this bone, has given the case of a woman named Catherine Kenny^(c), aged 30, from whom he removed about one-half of the lower jaw, sawing the bone at the symphysis, and disarticulating it on the right side. Referring to the volume in question for the history of this case, I may here observe, that, as Mr. Cusack has omitted to

give an account of the dissection of the amputated part in this interesting case, I may, with his permission, supply this deficiency, which I am now enabled to do from having carefully examined anatomically the amputated part, and procured a drawing of it by Connolly, which I lay before the Society (d).

I consider the specimen valuable, as it admirably illustrates the subject we are here discussing, namely, the pathological anatomy of bony cysts of the lower jaw with fluid contents.

The portion of bone removed in this case of Catherine Kenny comprises the entire right half of the lower jaw; the horizontal ramus of the bone is expanded into an oblong hollow shell (Fig. 2) with bony walls. This bony shell or cyst, we find, is, as to its interior, subdivided into many cells of various sizes, which are all lined by a fine polished membrane; they communicate freely with each other—in a word, the amputated part proved to be a multilocular bony cyst, with fluid contents. The cells contained a transparent albuminous fluid, the gradual formation and accumulation of which had expanded the bone.

I shall elsewhere continue the consideration of bony

cysts of the lower jaw, by making some observations on the history, symptoms, etc., and on the surgical treatment of this disease.

RUPTURE OF THE UTERUS, AND CON- GENITAL HYDROCEPHALUS.

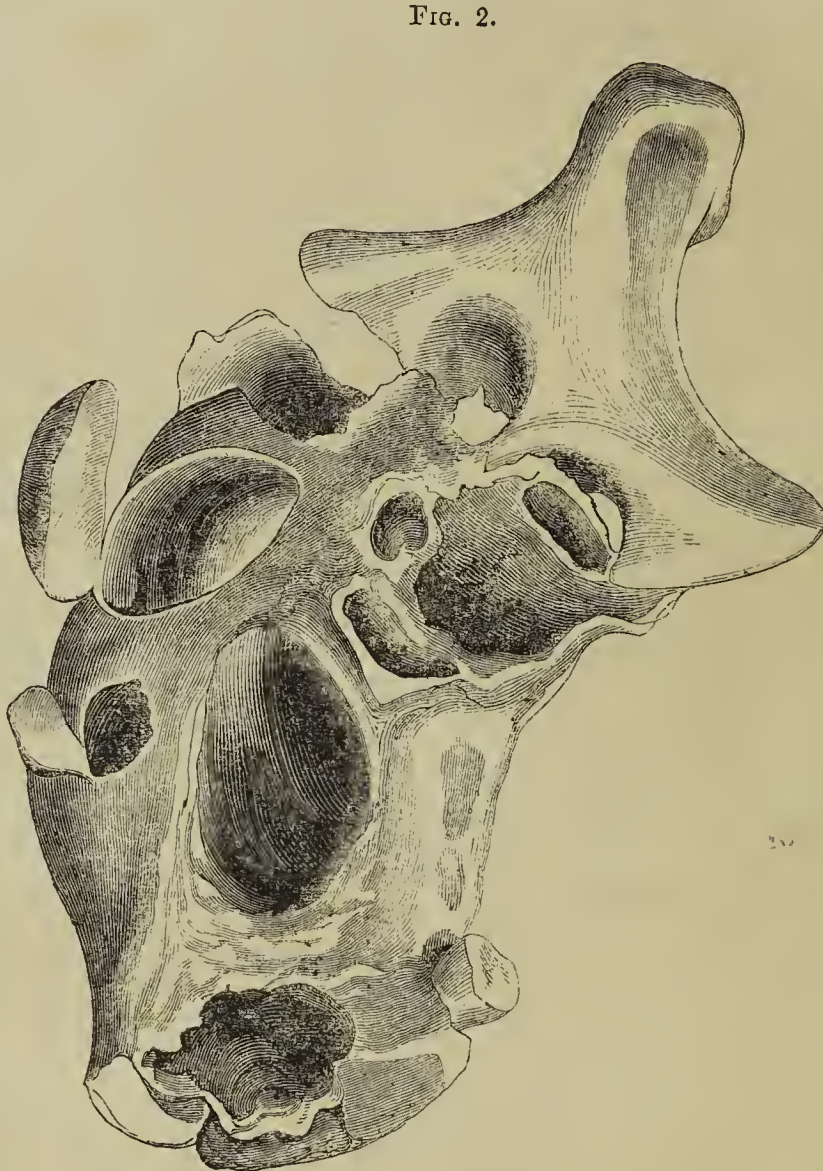
By GEORGE FREDERICK GILES, Esq., M.R.C.S., etc.

Mrs. H., aged 37, a pauper, was attended in her confinement of her sixth child by Mr. Vinal, one of the Surgeons of the Hackney Union. He was first summoned about one o'clock a.m. Finding the os uteri but very little dilated, and feeling one of the bones of the head, he left her, instructing the friends to call him again so soon as the pains became more regular and at shorter intervals. He was called again towards morning; the os was not then fully dilated, and finding something very unusual in the feel of the head, he sent to his colleague Mr. Welsh for his opinion. On the arrival of the last gentleman, pains being very inefficient, they agreed to leave her for a short time. They were absent a quarter of an hour, and on their return found the patient vomiting; she had had a most severe pain when the vomiting set in, and then all pain ceased. On examining, the head could no longer be detected with the

(d) The specimen was preserved in the museum attached to the Medical School in Park-street, in this city, which museum has been transferred to the Queen's College, Belfast.

(b) Dublin Hospital Reports, vol. iv.

(c) Loc. cit. page 29.



Multilocular bony cysts of jaw, with fluid contents.

finger, but the placenta was discovered in the vagina; dreading that rupture had taken place Mr. Vinal requested my opinion; I reached the house at a quarter past 9 a.m. I found the woman pallid, the pulse imperceptible at the wrist, and apparently dying. There was some external hæmorrhage. As had been stated, the head could not be reached with the finger, and the placenta then was not to be felt on passing the hand into the uterus. I discovered a rent in it through which the child had escaped; the hand readily came in contact with the head, which was found of immense size and fluctuating. To grasp the feet was the work of some difficulty, but they were readily brought down when reached; there was some difficulty also in getting the arms down. It was, of course, useless to attempt to bring the head till it had been emptied of the contained fluid. I therefore perforated through the occipital bone, and let off a large quantity of serum; judging from what escaped into the bed and the gush that took place as soon as traction was used, there must have been two or three pints, perhaps more. The head then readily passed; the placenta was detached, but as it offered some resistance, and fancying I felt some portion of the intestines about it, I allowed it to remain. The patient sunk three quarters of an hour after delivery. Post-mortem twenty-four hours after death.

The body was well-nourished; there was a considerable layer of fat over the abdomen. The first thing seen on opening the abdomen was the placenta, (it was low down in the vagina just before death); the uterus, partly contracted, (that is, all that portion of it above the rent was contracted, and in that portion the placenta had been attached), was seen with a slit in it about four or five inches long on the anterior wall, it extended from the upper part of the vagina, through the os, and about half-way up its whole length. There was no great amount of internal hæmorrhage; it appeared as if the woman sank more from the shock than from loss of blood.

Hackney.

THE LONDON

PRACTICE OF MEDICINE AND SURGERY

ST. BARTHOLOMEW'S & GUY'S HOSPITALS.

TWO CASES OF FIBRO-NUCLEATED TUMOURS ON THE ABDOMEN.

(Under the care of Mr. SKEY and Mr. COCK.)

DURING the last few weeks two examples of the fibro-nucleated tumour have been brought under our observation. We cannot better introduce a short notice of their facts than by quoting Mr. Paget's allusion to the class. He writes, "Dr. Hughes Bennett has given the name of *fibro-nucleated* to certain tumours, first described by himself, of which I think that future investigations will prove a very near affinity with those which I have been considering (the recurrent fibroid). They are, indeed, of so rare occurrence, that we cannot as yet be sure of many things concerning them; but their most usual characters seem to be, as assigned by Dr. Bennett, a general resemblance to the fibrous tumours; a tendency to return in the part from which one has been excised; an absence of disposition to affect lymphatics or more distant parts; and a texture 'consisting of filaments infiltrated with oval nuclei.' The first three characters are repetitions of those belonging to the recurring fibroid tumours; the last is not so; and yet the difference in structure is such as may consist with a very near natural relationship." In the first, a married woman, aged 30, was admitted under Mr. Cock's care into Guy's Hospital, on April 22. On her abdomen, a little to the right of the umbilicus, was a tumour, about the size of a fist, which was firmly incorporated with the skin, but movable on the muscles beneath, and easily lifted away from them. The skin over it presented the appearance of a scar, almost resembling keloid. The woman stated that three months ago she had received a blow on the part, after which tumefaction had followed, and the present tumour had begun to grow. She had not experienced any particular pain in it. Its outline was a little irregular from lobulation, but in every part well defined. It felt firm and fibrous. On May 5th Mr. Cock removed it by a free excision. Its section presented a vascular surface of pinkish colour, and showed bands of fibrous tissue dividing it

into lobes. It was carefully examined with the microscope by Mr. Thomas Bryant, who described it as "consisting of little else than nuclei, with some delicate fibre-tissue, and evidently belonging to the class of tumours known as fibro-nucleated."

The second case was one of longer duration and slower growth, and the growths, as might be expected, were less vascular. It is singular that in it the location of the disease was almost exactly the same.

A healthy-looking man, aged 21, was admitted under Mr. Skey's care into St. Bartholomew's, on account of a clustered growth of four or five tumours in the skin of the abdomen, a little above the right groin. The largest was the size of a small orange, and the smallest that of a marble. All of them had bases more or less constricted, though not actually pedunculated. Over the largest the skin was excoriated by friction. There had not been much pain in them. The man stated that they had existed for eleven years, and had slowly increased; he did not know of any cause for their appearance. Mr. Skey removed the whole together, the wound left being an oval one, of about five inches by four. As the tumours did not adhere to the muscles, the operation was attended by no difficulty whatever, and but little bleeding followed.

The tumours were afterwards examined by Mr. Paget and several other observers, and the conclusion came to was that they were examples of the fibro-nucleated class. Their section was pale, whitish and fibroid-looking.

The class of tumours which the above cases exemplify are those of the locally malignant kind, tending only to recur in the same place and not to reappear in internal organs. The further history of the cases will be of great interest.

GUY'S HOSPITAL.

FATTY TUMOUR OVER THE SPINAL REGION OF AN INFANT.—REMOVAL.

(Under the care of Mr. HILTON.)

WE have recently described two cases of solid tumours of congenital origin existing over the spinal region in children. In one of these the interest was increased by the circumstances that the tumour was a fatty one, and that its pedicle of attachment extended into the vertebral canal itself, the laminæ of the sacrum, over which it was situate, being wanting. Now fatty tumours are acknowledged to be of extremely rare occurrence in early life; and this fact, taken in connexion with the spinal malformation, induced in some a suspicion that the tumour might have originated in spina bifida, which during intra-uterine life had had its pedicle obliterated. Changes of not very dissimilar character are known to occur in some other morbid developments prior to birth, as, for instance, when a nævus becomes converted into a bunch of cysts connected together by strong fibrous bands. Probably also not a few of the pendulous outgrowths, consisting of hypertrophied masses of skin, which are sometimes met with of congenital origin, have resulted from the intra-uterine transformation of plastic effusion upon the cutaneous surface of the fœtus at an early period of its life. Now, as it is known that the sacs of spina bifida are often imbedded in remarkably thick layers of firm fat, such being, as it were, one of Nature's modes of giving them protection, the supposition that a fatty mass found existing over the spinal canal, communicating with it and adhering to the theca of the cord, may have originally had a cyst within it, appears not improbable. We know that not unfrequently the neck of a spina bifida will become obliterated, and exist only as a fibrous cord. Specimens of such a change exist in the Museums; but to advert to a remarkable one, which has attracted much attention recently, we might mention a case brought before the Medico-Chirurgical Society a few months ago by Mr. Solly, in which he had removed from the neck of a young lady a large pendulous tumour, which had been deemed to be a spina bifida in infancy, and which proved to be a cyst connected with the spinal region by a solid fibrous pedicle only. The probability was that it had been a *crania-bifida* or hernia of the cerebral membranes through the occipital bone just above the neck, and that its communication with the head had become obliterated in early life. Mr. Hilton operated at Guy's Hospital two years ago on a case of similar nature, in which the cyst was situate on the head of an infant. The case which induces us to make these remarks is one of fatty

tumour over the centre of the spine of an infant which has been under treatment in Guy's during the last month, and which, excepting that no spinal communication existed, almost exactly resembled that operated upon by Mr. Athol Johnson, and adverted to above.

A healthy male infant, aged 16 months, was admitted under Mr. Hilton's care on account of a tumour over the lumbar spine, which had been considered to be a spina bifida. It was about the size of the half segment of an apple, and had tolerably firm deep connexions. The account was that it had existed at the time of birth, but had continued to increase since. The child had no paralysis of the lower extremities, and had never suffered from cerebral symptoms of any kind. Having convinced himself that it was a solid growth, and did not contain fluid, Mr. Hilton proposed to remove it. The operation was not attended by any difficulty. The vertebral processes proved to be completely formed, but it was especially noticed that the arteries supplying the tumour came up exactly in the median line. The tumour itself was of granular fat, its lobules being finely divided and connected together by much firm fibrous tissue. The tumour, in fact, pretty exactly resembled in texture that shown by Mr. Athol Johnson at the Pathological Society. The patient recovered well.

ST. THOMAS'S HOSPITAL.

CASE OF COMPLETE OBLITERATION OF THE THORACIC AORTA.

(Communicated by Mr. SIDNEY JONES.)

THE specimen described in the following communication is probably unique as to the condition illustrated. The subject from which it was obtained was brought into the dissecting-room of St. Thomas's Hospital from a workhouse. He was a male, and aged forty-five years, but no particulars as to his state of health could be obtained beyond the account that some little time ago he had been under care in Guy's Hospital on account of chest disease. His lungs showed evidences of past inflammation. It was evident that the condition of the aorta had existed for long, and most probably the collateral circulation had become sufficiently established to prevent any material inconvenience from being felt. There was no reason to think that this lesion had anything to do with the fatal illness. The specimen, carefully dissected and in a dried state, now forms part of the St. Thomas's Museum. The obliteration is situated at the commencement of the descending thoracic aorta, just below the junction of the ductus arteriosus with the termination of the arch. In the dried state it looks as if merely a constriction of the vessel existed; but in the recent state the obliteration was seen to be complete, a ligamentous cord about half an inch in length uniting the two ends of the artery.

Just above the obliteration is a quantity of atheromatous deposit, involving at that point nearly the whole circumference of the vessel. The arch is much enlarged, as are also its three arterial trunks. The latter were at least double their usual calibre.

Below the obliteration the aorta forms a bulbous dilatation, which extends about the length of two vertebræ, viz., from the upper border of the 5th to the lower border of the 6th dorsal vertebra. Its diameter is very much increased, and varies from an inch and a half to two inches. Opening into this dilatation are four intercostal arteries on each side; those of the right side are somewhat the largest, the upper one being about the size of a very large goose-quill. They are very tortuous, and gradually diminish in size from above downwards, the sixth intercostal on each side having about its normal diameter.

The aorta below the dilatation is also enlarged, but begins to assume its normal calibre opposite the upper border of the 9th dorsal vertebra, having gradually diminished in size, and being thus rendered somewhat infundibuliform.

The first Aortic Intercostal of the right side is very tortuous passing outwards, between the third and fourth dorsal vertebra, to the head of the fourth rib; then ascending vertically to the head of the third rib; having first given off from its inner side a branch, about the size of an ordinary radial, which runs upwards along the centre of the bodies of the three upper dorsal vertebræ, and anastomoses with a branch

from the inferior thyroid of the subclavian. The artery (*i.e.* first intercostal) turns outwards above the third rib, gives upwards a large branch, which anastomoses with the superior intercostal of the subclavian, and then divides into two branches; one continues its course between the second and third ribs, the other is double its size, and passes through to the back.

The Second and Fourth Right Aortic Intercostals are large, and divided likewise into an anterior and posterior branch; the posterior branch in each case is much larger than the anterior.

The Third Intercostal of this side is much smaller than the first, second, and fourth, and gives off a very small posterior branch, the greater part of the artery continuing its original course.

The First Aortic Intercostal of the left side has its calibre somewhat less than that of the opposite side; it is very tortuous, and ascends to the interval between the second and third ribs; it gives off one branch (size of small radial), which runs behind the œsophagus, and anastomoses with a branch of the inferior thyroid. It then divides into an anterior and posterior branch, the last of which forms the greater bulk of the artery, the anterior not being much larger than an ordinary intercostal.

The posterior branch of the Second Aortic Intercostal of this side is much larger than the anterior; the other intercostal arteries of this side have their posterior branches much smaller than the anterior.

Branches of Right Subclavian.—The internal mammary and transversalis colli arteries are very large, and have a diameter little less than an ordinary subclavian. The transversalis humeri is also large, and takes its origin from the third part of the subclavian.

1. *Transversalis Colli.*—The posterior scapular branch takes its ordinary course along the vertebral costa of the scapula; its principal branches are directed inwards, three or four large trunks running inwards, and anastomosing directly with the large posterior branches given off from the intercostal arteries.

2. *Internal Mammary.*—The branches given off from the outer side of this artery, and which run along the three or four upper intercostal spaces, are large, and anastomose directly with the anterior branches of the intercostal arteries. The musculo-phrenic forms free anastomoses with the diaphragmatic arteries of the abdominal aorta.

3. *Inferior thyroid* is larger than usual; its glandular branches are about their normal calibre; a branch runs downwards and forwards to the œsophagus, and meets an ascending branch, given off from the first aortic intercostal.

4. The *Vertebral* is of little more than ordinary diameter.

5. The *Superior intercostal* is about the size of the internal mammary and transversalis colli arteries; it gives off a large deep cervical branch, and then continues its course tortuously to the first intercostal space, at which point a large posterior branch is given off.

Branches of Left Subclavian.—The vessels of this side are given off just as on the right side, but their calibre is smaller. The subclavian on each side is reduced to at most half the diameter it had before the giving off of its trunks. The deep epigastric on each side is very large, having about the diameter of the corresponding internal mammary; very free anastomoses are formed between it and the last-named artery.

We find, therefore, that the principal communications by which the circulation was carried on are—

1. The *Internal mammary*, anastomosing with the intercostal arteries by means of the musculo-phrenic and comes nervi phrenici, with the diaphragmatic of the abdominal aorta, and largely with the deep epigastric.

2. *Superior intercostal*, anastomosing anteriorly by means of a large branch with the first aortic intercostal, posteriorly with the posterior branch of the first aortic intercostal.

3. *Inferior thyroid.*—A branch, about the size of an ordinary radius, forms a communication between the first aortic intercostal and this vessel.

4. *Transversalis colli.*—Very large communications with the posterior branches of the intercostals. The size of this artery, with its large anastomosing branches, first led one to look for some obstruction.

6. The branches going to the side of the chest were large, and anastomosed freely with the lateral branches of the intercostals.

HOSPITAL NOTES.

IMPROVED ARTIFICIAL EYE.

AN important improvement in the form of artificial eyes has recently been made at the Moorfields Ophthalmic Hospital. The suggestion of it is due to the ingenuity of Mr. Moon, the talented House-Surgeon to that Institution, and it has been carried out by Mr. Gray, of Goswell-street. The improvement adverted to consists in giving the eye a back (of shape and degree of projection, modified according to the need of a special case), instead of making it, as formerly, concave, and fitting by its rim only. The concave eyes often sink too far back, and are difficult to keep in their exact place. These inconveniences are more especially felt when, according to the modern practice, the globe has been removed, instead of the front of it sliced off. After excision of the eyeball, although the hollow left is incomparably less than would be expected, yet it exists to an extent sufficient to allow a glass eye to sink more than it would have done had a part of the sclerotic been allowed to remain. Then, again, as no stump of the globe remains for the substitute organ to fit upon, the movements, although very fair, are not perfect. With the form of eye devised by Mr. Moon, which has already been used in several cases, this defect is very greatly remedied. The full back enables the eye to be so fitted to the sulcus of conjunctiva as to fix it with tolerable firmness, and allow the muscles to act efficiently upon it. It is probable that some further modifications in its shape may be adopted, and, when complete, we shall give a woodcut, which will better illustrate its peculiarities than a mere description can do.

DISEASE OF THE HIP-JOINT SIMULATING A SOLID TUMOUR.

A case, which for nearly a year past has excited great interest in the London Hospital on account of the obscurity of diagnosis, has recently ended fatally. The patient was a woman, aged about 37, under the care of Mr. Curling. She was of healthy aspect when first admitted, and complained only of pain about the region of the left hip. A movable mass, feeling not unlike a firm fatty tumour, could be felt just behind the great trochanter, and there was an evident widening of the hip. Still there was nothing like abscess, and the swelling was not very marked. By degrees it became apparent that there was a tumour forming just within the iliac fossa. It was tense and elastic, and gave the impression to many who examined it of some growth from the bone, an opinion which was strengthened by the existence of the movable tumour just mentioned. The woman complained of incessant and wearing pain, and she lay constantly on her back, dreading any movement of the part. By degrees her health declined, and she lost flesh. The thigh was never retracted on the pelvis. At length the swelling about the outer part of the crest of the ilium became so great, and was attended by so clear a perception as if of deep-seated fluid, that Mr. Curling employed a grooved needle. No pus escaped, and the puncture was therefore deemed to support the conclusion already arrived at that the fluctuation was of that pseudo kind, so often met with in the softer forms of cancerous tumours. The main swelling was throughout within the crest of the ilium. A few days before the patient's death, which resulted from exhaustion, Mr. Curling was induced by the position assumed by the limb, and the increased prominence of the abscess, to suspect that the real affection was hip-joint disease. The result proved this suspicion to be correct. A large abscess existed beneath the iliac muscle, separating it from the whole venter of the bone. The head of the femur was deprived of its cartilage, carious, and dislocated on to the dorsum ilii. The lesser trochanter fitted into the acetabulum. The cavity of the acetabulum was occupied by loose lymph. The bone itself was carious, and perforated by ulceration in its centre. Through this perforation the large collection of matter within the pelvis communicated with the smaller one which surrounded the head and neck of the bone externally. The case was of importance chiefly as showing to what an extent of destruction disease of the hip-joint in the adult may go without the occurrence of superficial abscess. It was the absence of the usual signs of purulent effusion externally, and the early existence of tumefaction on the inner side of the bone, which had led, we believe, all who saw the case in its early stages to suspect a solid growth. The small movable tumour

externally had ceased to be discoverable for six months before the patient's death, and its real nature remains unexplained.

PUNCTURE TREATMENT OF HYDROCEPHALUS.

Dr. Ramskill has at present under care, at the Metropolitan Free Hospital, two cases of hydrocephalus, in which the propriety of performing paracentesis is under consideration. In one the child is a fine, well-grown girl, a little more than two years old, in whom the cerebral functions appear perfect, excepting that she cannot walk. The increase in size of the head began without fits, at the age of five months, and steadily progressed. The head now measures somewhat more than twenty-one inches in circumference, and about thirteen from ear to ear. The first dentition is complete. Like many children affected with chronic hydrocephalus, she is intelligent, and appears to have an active brain. Irritability of temper, and proneness to fly into passions, is almost the only observable peculiarity as regards her intellectual functions. Puncture of the cerebral ventricles is an operation not in much favour amongst London Physicians. We well recollect, about six years ago, seeing a patient under Dr. Arthur Farre's care in King's College Hospital, on whom it had been three times practised, about 3vj. of serum having been removed on each occasion. After the last tapping the head had not enlarged. In it the disease had commenced at the age of six weeks. It was a well-grown, healthy-looking, and observant child. Dr. Farre remarked, in answer to a question from one of his class, that he should on no account adopt the puncture treatment in a congenital case. The rule which has been laid down by some, that it is best suited to external hydrocephalus, is of but little use in practice, on account of the difficulty or impossibility of forming an accurate diagnosis. Should the operation be performed in either of Dr. Ramskill's cases, we shall again advert to their details.

SCABIES ON THE FACE.

A mistaken opinion prevails that scabies never attacks the face. The writer has seen, during the last few months, at least half a dozen instances in which it did, and its not infrequent occurrence in that locality is fully acknowledged at the Hospital for Diseases of the Skin. It is generally in young children of fair complexion and delicate skin that its spreading to the head or face occurs. In such cases we have seen it cover the face, ears, and scalp.

NITRO-MURIATIC ACID IN THE GASTRIC FEVER OF CHILDREN.

A remedy, which is a favourite one with Dr. Arthur Farre, in his out-patients' room at King's College Hospital, in the treatment of gastric fever in young children, is the nitro-muriatic acid. To a child of a year and a half to four years old, a mixture containing a drachm each of the diluted nitric and hydrochloric acids, to six ounces of water, is ordered, in doses of half an ounce, three times daily. At the same time a dose of grey powder (four grains) is given every night at bed-time. If the disease be passing off, and tonics needed, the grey powder may be omitted, and the acids given in infusion of quassia, or with bark. The peculiar tongue of infantile gastric fever is well known, resembling closely that of scarlet fever in the prominence of its papillæ, but differing from it in having a white, instead of a red ground. Thus the papillæ present in the midst of a whitish fur; but in some cases the centre of the tongue is red and beef-like, the sides only being furred.

EXPECTED OPERATIONS.

On Saturday, this day, at St. Thomas's, Mr. Simon will perform lithotomy, and also remove a large portion of the tongue, on account of cancer. At King's College, on the same day, Mr. Fergusson will excise the elbow-joint, and also remove an epulis and a tumour from the neck. At St. Mary's, on Wednesday, Mr. Brown has two cases in which plastic operations on the vagina are to be performed.

LEGAL REPRESENTATIVES IN PARLIAMENT.—The number of lawyers in the new Parliament is "fifty-seven," of which seven are solicitors, and the rest Queen's counsel, serjeants-at-law, and barristers.

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Medical Times & Gazette.

SATURDAY, MAY 16.

MEDICINE AND THE STATE.

DURING the past and the present week Medical affairs have received an unusual amount of attention in Parliament and by the Government, as a glance at our columns of Parliamentary Intelligence, and the copy of the Royal Commission of inquiry into the organization of the Medical Department of the Army to be found at page 500 will show.

We announced several months ago that this Commission would be appointed, and mentioned the names of Mr. Sidney Herbert, Mr. Stafford, Dr. Andrew Smith, Sir James Clark, and Mr. Martin, as members. These names, and those of the other gentlemen comprising the Commission, afford every assurance that the important subjects they have to consider will be investigated satisfactorily. Dr. Balfour, of the Royal Military Asylum at Chelsea, who, in conjunction with Colonel Tulloch, is so well known as the compiler of the Statistics of the Health of the Army, has been appointed Secretary of the Commission; and it is unnecessary to add that a better choice could not have been made. The Commission is an honorary or unpaid one. Two meetings have been held this week, at which the views of Dr. Andrew Smith and Sir John Liddell on the state of their respective departments have been elicited.

The Medical Reform Bill of the Corporations meets in Parliament with the opposition which we anticipated from the Universities of London and Edinburgh. Lord Elcho, the advocate of the Universities *versus* the Corporations, brings forward the Bill of last year, as amended by the Committee of the House. When are we to hope for a little mutual concession in Medical government?

The General Board of Health is put down at last, and becomes a subordinate Section of the Home Department. Nobody regrets the fall except a few interested persons. The Board has been a mistake from beginning to end. It has struggled on through alternations of pity and ridicule, blamed both for what it did and what it left undone, until it is absorbed into another office. It never enjoyed a particle of confidence from the public, or respect from the profession. Its presidents were gentlemen utterly devoid of Medical knowledge, and its chief members were crotchety enthusiasts, whose reports have been anything but creditable to their authors. So that, until we have a Medical Minister of Health, and an organized body of Health Officers throughout the country, forming a separate department, the change announced by Sir George Grey may be received with qualified satisfaction. Nothing can be worse than the moribund Board. By the

change, Sir George says some £4,000 a-year will be saved the country. We have little doubt that £4,000 will be saved according to the present system of things. But what good might £4,000 a-year effect under another and a better regime.

The question of Poor-Law Medical Relief has not yet come on, but a public meeting of the Poor-law Medical Officers of England and Wales will be held in London on Thursday, the 28th inst., to decide on a form of petition to be presented to Parliament, and to transact such other business, connected with the Poor-law Medical Reform movement, as may then be thought desirable. A circular by Mr. Griffin, announcing the time and place of the meeting, will be forthwith distributed to every Poor-law Medical Officer. This circular contains the draft of a petition which it is intended to present to Parliament, and a list of the Unions the Medical Officers of which have not yet joined the movement. At the meeting about to be held, the Earl of Shaftesbury has consented to preside, and the chair will be taken at two o'clock precisely; but a meeting of the committee, which is open to all, will take place at half past twelve o'clock, to make the necessary preliminary arrangements. It is hoped that not only the Poor-law Medical Officers will assemble on this important occasion, but that the whole Profession will take part in the meeting, and by a numerous attendance prove the general sympathy with the cause of Poor-law Medical reform. It is suggested that, as it is most essential for the meeting to be well attended, each Union should at least send up a deputy to take part in the deliberations. We are happy to learn that most of the Medical Officers holding appointments in 455 Unions and Poor-law Incorporations have taken part in the present movement; and the urgent necessity for some reform must be evident, not only from the fact of so many persons having joined in the common cause, but from the startling announcement that, in the year 1855, 290 Medical Officers of Unions resigned their appointments, and in the year 1856, the resignations amounted to 249! Surely this latter fact speaks trumpet-tongued as to the hardships and ill-usage to which Poor-law Medical Officers are exposed, for so great a number of resignations could not possibly occur in a service where the emoluments were even moderately remunerative, the labour not excessive, and the behaviour of the authorities not tyrannical. We regret to learn that, out of 3048 Medical Officers now holding 3252 appointments, only about 1200 have subscribed to the funds to defray the expenses, which are necessarily very great; and it must also be a matter of regret that the Union Medical Officers of the metropolis have very feebly responded to the call made upon them by their oppressed and insulted brethren of the provinces. It is not yet too late for the London men to wipe off the reproach thus cast upon them. Among those who originally subscribed many have ceased to do so, have probably relinquished their offices in disgust, and ceased to take any interest in the Poor-law Medical Reform movement. But we earnestly hope that personal motives will be set aside in the coming struggle, and that both those who now are Poor-law Medical Officers and those who have ceased to be so, will join the general movement, and that the great body of the Profession will also lend their zealous co-operation in securing the just rights of their Poor-law Union brethren. It should be recollected that the movement now in progress affects not only those who hold office at present, but their successors. Let all then join heart and hand in moving the legislature to a just appreciation of our rights. Multitudes of young men now studying the Profession at the Medical Schools will, in very many cases, enter upon Union practice at no distant period, and for their sakes, if not for our own, we should endeavour to establish the mutual relations of the Profession on the one hand, and the Poor-law authorities on the other, on a fair, a just, and an honourable basis.

THE WEEK.

WE are threatened with another new "pathy" or "ology." As vaccination is a safeguard from small-pox, so glanderation or farcination is to cure pulmonary and almost all other diseases. At least so says Dr. J. G. Wilkinson, in our respected contemporary the *Veterinarian*. The morbid products of glanders and farcy in the horse are to extinguish "certain human diseases." Glanderine is "little short of a specific in the worst forms of bronchitis." "It saved a little patient, apparently suffocating from diphtherite in the mouth and nose." "It has been tried in putrid fever with the most marked and rapid success." Farcine has "cured one case of anasarca of the lower limbs." This is what glanderation has done already. What it is to do is to cure phthisis, the effects of all animal poisons, pneumonia, scarlatina, carbuncle, and plague, erysipelas, pyæmia, phlebitis, confluent small-pox, skin diseases in the human subject and the murrain in cattle. The glanderine and farcine are taken from the nose and lungs of diseased horses immediately after their destruction, and go through various stages of dilution until globules are prepared which are dissolved in water when required, and each dose contains "*the twenty-millionth of a grain one thousand million times extended.*" So the new pathy is an old pathy after all, not worth powder and shot.

Last week a French *confrère*, Dr. Salle, lost his life in the performance of an act of professional duty, at the age of 29. He had performed tracheotomy on a child suffering from malignant sore throat. Some blood passed into the trachea, Dr. Salle instantly applied his mouth to the opening, and sucked out the blood. On the following day he was attacked by the same form of sore-throat, and died forty-eight hours afterwards. A discussion has arisen as to the mode of transmission of the disease in this case, whether by the blood taken into the mouth and perhaps swallowed; or by contact with the aplastic lymph lining the air passages; or by simple inspiration of the breath of the child. The question is not without its interest, but it sinks before the importance of the fact, that he who follows the example of Dr. Salle, and attempts to save the life of another in a similar case, incurs a very serious risk. The necessity for clearing the trachea after tracheotomy is so frequent that some simple form of aspirator is a desideratum. That of M. Chassaignac is too complex, and not likely to be at hand when wanted. Probably one of the common elastic bags with ivory mouths now often used as cupping-glasses would answer very well.

In reference to the paragraph which appeared in our Journal last week, relative to the Victoria Military Hospital, we are requested by the Medical officers of the Middlesex Hospital to state, that the objections which they entertained to the proposed building were not founded upon any plans published in the *Builder*, but upon a careful study of the final plans, signed as approved by Her Majesty the Queen, by Sir John Burgoyne, and by Captain Laffan, which, together with the specifications, they examined in February last, in company with the architect. At that time the works had been for many months in active progress in accordance with the plans above referred to. The Medical officers of the Middlesex Hospital inform us that they have no means of knowing how far Dr. Andrew Smith's objections coincide with their own, but the result of an interview which they have since had with the Committee at the War-office has only been to confirm their opinion, that, notwithstanding the alterations, the building is quite unfitted for the purposes of a hospital.

Mr. Gamgee has addressed a second letter to the Home Secretary on the subject of diseased meats. There is not

much added in this letter that is more convincing than the statements in the last, but perhaps the author hopes by blow upon blow on the head of the minister to get his own way. In the fourth section, on Legislative Supervision, there are, however, one or two hints new and good. Inspectors, he proposes, should be on duty in the great live and dead markets whenever business is being carried on, particularly at night, which honest people should remember is busy day with rogues. In the City markets business begins long before daylight; the best time to exercise supervision is while the meat is being carried in; casual inspection in a full market must as completely fail to detect the hiding-place of the bad meat, as occasional visits of one or two officers in a crowded hall would assuredly fail in detecting pickpockets. Inspectors of nuisances should, so Mr. Gamgee urges, be provided on a different footing altogether. It is preposterous to suppose that the 195,000 inhabitants of St. Paneras can be protected from filthy and abominable frauds by the one inspector now attached to the district. Lastly, no cattle should be allowed to land on our shores without a clean Bill of Health, which Bill the British consuls at the places of export should be instructed to furnish only upon reliable information, such as could be gleaned from the excellent Veterinary schools which abound upon the Continent. To this we must add a quarantine of observation at the port of arrival in this country.

Sir Charles Locock made known a very important fact with regard to the treatment of some forms of Epilepsy, at the meeting of the Medical and Chirurgical Society last Tuesday. We shall give his speech in full next week, with the usual report of the meeting, but may state, in the meantime, that in cases of hysterical epilepsy in young women connected with sexual excitement, and recurring at the periods of menstruation, he has found the bromide of potassium, in doses of from five to ten grains, remarkably efficacious. Of fifteen cases in which he had tried it, it had failed in only one. Sir Charles attributed the good effects of the bromide to its power of diminishing sexual excitement.

WE alluded, a short time ago, to a Medical Protection Association lately established in Cork, the object of which is to protect the rights and privileges, and advance the interests of the Medical Profession. We then stated that applications had been made to various Irish members of Parliament, and to candidates for a seat in the House of Commons, to promote the objects of the Association in the Legislature: and we announced that favourable replies had been returned. We are glad to observe, by the perusal of an Irish Journal which has reached us, that not only have several distinguished Irish representatives expressed their cordial concurrence in the views advanced by the Cork Medical Association, but that they have permitted their letters to be printed. Mr. Butt, the member for Youghal, thus expresses himself:—"I will at all times feel sincere pleasure in doing everything in my power to uphold the honour, protect the rights, and maintain the position of the Medical Profession in Ireland. I feel aware, in much of our legislation, that the high claims of that body to the consideration and respect of the country have been, to say the least, overlooked; and I shall be always glad to attend to any suggestions on the subject with which your Society may favour me." Mr. J. F. Maguire, the member for Dungarvan, is still more emphatic and explicit:—"Let me assure you that it will afford me the greatest satisfaction if I can at any time, or in any capacity, whether as a member of Parliament, or as a member of a Local Board, be the means of rendering justice to a body of men who, among the most highly educated of the community, seem to be marked out for injury and injustice. Badly paid and overworked, the Medical man is too often

treated with an arrogance and disrespect the most discreditable; and his position, especially when he happens to be at the mercy of a public body, rendered a source of constant anxiety and annoyance by discussions and resolutions in the highest degree irritating and offensive. I have been ever opposed to the policy of paying an educated gentleman, entrusted with the most responsible duties, at the rate of an ordinary mechanic or a second-class butler, and I shall gladly resist that stupid and insulting policy on every possible occasion, whether in or out of Parliament." The success which has attended the efforts of the Cork Medical Protection Association, and the satisfactory replies which they have received from men of influence and station in the sister island, ought to stimulate the Profession in England and Scotland to similar exertions. We feel convinced that the cause of Medicine is neglected in the Legislature chiefly from ignorance of the grievances under which the Profession suffers; and that if every Medical man would exercise his influence in making known to members of Parliament and other persons placed in authority the actual state of Medical science and practice in its relations to the public, efficient remedies to the existing evils would soon be devised. The principle of association adopted by our brethren at Cork is unquestionably a good one; for remonstrances and suggestions emanating from a combined body increase most powerfully the weight of private representations; and if the various Medical Associations now existing in this country were to make the same kind of appeal to the English members as that which has just been made so successfully to the Irish, we have no doubt that the same satisfactory results would ensue.

Dr. Sayer, well known for the attention he has paid to the subject of Drainage, and his care for the pockets of rate-payers in general, as well as for the public weal, has published an elaborate treatise on the Drainage question. Dr. Sayer laughs at the idea of modern England, with her railways and engineering facilities, becoming the mere imitator of ancient Rome, and, at a cost of £4,000,000, achieving the loss of liquid wealth which could and should be saved. His scheme for the removal and distribution of sewage may be called the out-and-out steam plan. Adequate steam-power should transfer sewage waters to numerous covered reservoirs and covered filtering beds within our agricultural districts, through cast-iron tubes, carrying daily abundant tributary streams from the metropolis and all large towns, to spread by irrigation fertility, and minister increasing abundance. Public roads, and the network of modern railways, will indicate the appropriate lines, and the electric telegraph should govern and regulate valves for transmission and circulation.

The Annual Meeting of the Royal Medical Benevolent College on Tuesday has led, very fortunately for the interests of the College, to a termination of the questions which have been so much discussed of late, as to the cost of the boys maintained at the College. The Council agreed, very properly, to a publication of all the details of expenditure, promised to lower the terms of payment as soon as possible, and the meeting ended with great cordiality.

The election of Dr. Fleming to the office of Physician to the Queen's Hospital, and Joint-Professor of Materia Medica at Queen's College, Birmingham, is an event of great Professional interest, not only because a good man has been put into an important position, but more especially from the manner in which the election was conducted, all canvassing having been strictly prohibited. The appointment was made on the published report of the other Professors of Queen's College,

giving the qualifications of the candidates, and the grounds on which they recommended Dr. Fleming. This is the way to obtain high talent for high posts.

REVIEWS.

The Functions and Disorders of the Reproductive Organs in Youth, in Adult Age, and in Advanced Life. Considered in their Physiological, Social, and Psychological Relations. By WILLIAM ACTON, late Surgeon to the Islington Dispensary, and formerly Externe to the Venereal Hospital, Paris. Pp. 108. London, 1857.

Mr. ACTON has devoted himself for many years with unwearied assiduity to the study of the diseases of the reproductive organs, and after an intimate acquaintance with syphilitic diseases gained in the Clinique of M. Ricord, he has pursued in this country the same series of researches as those which he commenced under that distinguished specialist. Indeed, with Mr. Acton, the investigation of every circumstance connected with the generative function has been (without intending a pun) a labour of love; and we accordingly find that whether as regards the structure, the functions, or the diseases of the organs in question, every circumstance has received the minutest attention. The work now before us is a reprint from the third edition of the "Practical Treatise on Diseases of the Urinary and Generative Organs," by the same author; and he informs us that he thinks it expedient to publish it separately, as it contains information concerning the well-being of society which it is especially desirable should be more extensively diffused than can be accomplished by the larger work, the bulk and strictly professional details of which limit its circulation within a comparatively narrow compass.

Mr. Acton, in this literary offshoot from his parent trunk, entirely limits himself to the description of the Functions and the Functional Disorders of the Reproductive Organs, reserving in the larger work the whole history of syphilitic and other structural diseases. He divides the lesser subject into three parts, according to the time of life when the generative function is in its origin, its maturity, or its decay; or in other words, his division is threefold, as the phenomena of natural or disordered action in the male are displayed in youth, in adult age, and in advanced life. The nature of the information conveyed under these heads will readily be understood; and although it is usual to pass over many of the particulars with a casual notice or to neglect them altogether, Mr. Acton thinks that such reticence is not only unnecessary but is positively hurtful, and that a more extensive knowledge of the subjects discussed in his Treatise would conduce to the improvement of the physical and moral condition of society.

On the subjects of Impotence and Spermatorrhœa, those bugbears of so many weak and foolish persons, and sources of inexhaustible wealth to the quack fraternity, Mr. Acton discourses with good sense, and indignantly exposes the nefarious tricks of the scoundrels who, on the pretence of curing a disease which often exists only in imagination, extract enormous sums from their unwary victims. He seems to regard the spermatorrhœa-phobia, as we may term it, to be a species of monomania, in which light we ourselves are inclined to regard it; but he judiciously advises that, to a patient labouring under this form of mental malady, the tone adopted should be one of sympathy and attention, not of ridicule or disbelief; and that by the employment of appropriate moral and therapeutical means, the morbid terrors of the imagination may be dispelled, and a healthy and hopeful tone of mind be restored. Where spermatorrhœa really exists, Mr. Acton recommends the injection of a solution of nitrate of silver, in the proportion of ten grains to the ounce, by means of a syringe with a long tube. He prefers this mode of treatment to the application of solid caustic by Lallemand's instrument, as he conceives that the fluid comes in contact with every part of the urethra, instead of leaving some parts untouched, as is the case when the nitrate alone is employed.

A Practical Treatise on Hip-joint Disease; with reference especially to Treatment by Mechanical Means, for the relief of contraction and deformity of the affected limb. By WILLIAM CURTIS HUGMAN, F.R.C.S., late Surgeon to the Hospital for Deformities, Great Portland-road. 8vo, pp. 92. London, 1857.

Mr. Hugman has had very large opportunities of seeing disease of the hip-joint, having been attached for some years as Surgeon to the Verral Institution, where this disease is treated in a manner not, perhaps, so generally known to the Profession as it ought to be. It has been usual to treat patients at this Institution by placing them in the prone position, on a couch, furnished with those appliances which are necessary to ensure the comfort and quietude of the patient. The author of this work has followed out this plan in his private practice, and has found it answer admirably in restoring the deformed and diseased hip, not only to a healthy condition, but to its natural position.

It must be admitted that the object of preventing the great deformity which so often obtains from hip-disease is a most desirable one; and the principles upon which Mr. Hugman acts are not only sound and rational, but calculated to bring about the desirable object of curing the disease and obviating distortion: namely, the adoption of perfect quietude of the body, and the affected joint in particular, and the use of extension gradually applied to the limb, by which means it may be in time brought into a perfectly natural position.

Mr. Hugman is also not unmindful of the necessity of employing general constitutional treatment. He calls especial attention to this point.

Although this work is in a great measure a reprint of one published some six or seven years ago, the author has introduced some additional cases of very great interest, confirming his previous views. We can strongly recommend the work; it is written modestly and clearly, and it is furnished with several illustrations, showing very forcibly the benefit arising from the treatment recommended.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

OBSERVATIONS UPON THE TREATMENT OF WOUNDS IN THE CRIMEA.

By M. BAUDENS.

THE conical balls employed in the late war, impelled with greater force than the ordinary bullet, enter in a straight line, and give rise to more numerous and to larger splinters of bone. The resistance misshapens them without scarcely ever causing them to deviate; and they become elongated or flattened, or separated even into several pieces, oftener than round balls. The aperture of exit of the conical balls is almost always diametrically opposite to that of the entry; while it often happens that the passage of a round ball is not direct.

The practice of enlarging by the bistoury the apertures of entry and exit, so approved of by the highest authorities in the early Algerian wars, but which was protested against by M. Baudens, was entirely abandoned by general consent in the Crimea. When the wound is simple it heals unaided, and when it is complicated by the detention of foreign bodies, *débridement* alone, without the removal of these, is of no avail. Frequently a ball detained among the soft parts resists the attempts to extract it, but for this purpose the enlargement of the incision of the skin is useless. The obstacle to its removal consists in a thin transparent cellular lamella, with which the projectile becomes surrounded at the end of its track. If this little sac be opened the ball is easily removed.

Gun-shot wounds being essentially contused wounds, active inflammatory action is set up, which often calls for energetic treatment. In these cases cold, in the form of ice, which M. Baudens employs in traumatic lesions, he regards as the best therapeutical agent.

Prior to the Crimean war it was a principle generally received, that the fracture of the femur produced by gun-shot, necessitated amputation. The apparatus for fractures that he has contrived and described to the Académie des Sciences has

enabled an appeal to be made against so absolute a sentence. Both in the Crimea and at Constantinople many cases of fracture of the femur caused by projectiles have been saved by their agency. The detached splinters, which would have kept up an interminable and often fatal suppuration, were first removed, the limb was placed in a sloping position to favour the flow of pus, and nature was left to act freely without constraint.

Amputations of the thigh are more formidable the nearer they approach the trunk; and up to the present time amputation of the hip-joint has only succeeded on condition of having been practised some time after the wound was received. This is of great importance, for it follows that we should at first try to preserve the limb. The upper extremity of the femur, consisting almost entirely of spongy tissue, the ball meets with less resistance, and produces less damage. The fracture apparatus should therefore be applied, and if it fail, it is always time to have recourse to amputation; inasmuch as, in this case, contrary to the general precept, secondary is preferable to primary amputation.

As regards the upper extremity, we may frequently avoid amputation and preserve it, not only by the removal of splinters, but by the operation of resection, a procedure which gives rise to the most admirable results. M. Baudens having long advocated them, felt highly gratified at finding the Crimean Surgeons so frequently resorting to them, in place of amputation of the entire limb. The true triumph of resection is its performance upon the head of the humerus. M. Berthier, now colonel of the 86th Regiment, was operated upon by M. Baudens' procedure, and now uses his arm very well. M. Plombin, operated upon in Algeria twenty-three years since, is now colonel of the 1st regiment. Not only do the resections possess the advantage of saving the limb, but of being more certainly followed by recovery. The periosteum must be most scrupulously, as far as possible, preserved; for M. Flourens has shown that this membrane, which secretes the bony tissue, will reproduce this if it remains *in situ*. We are not able to practise resection upon the lower as upon the upper extremity, especially in the time of war, when the wounded are exposed to long and difficult transports. The organ of support, the lower extremity, requires a greater solidity than the upper.—*Comptes Rendus*, April 6, 1857.

EXCERPTA MINORA.

Influence of Coffee in the Reduction of Hernia.—M. Triger relates the case of a patient suffering under strangulated inguinal hernia, for which the taxis and ice had been employed in vain, and the operation seemed to offer the only chance. An old Practitioner, Dr. Durand, from Havannah, however, ordered the man to take every quarter of an hour a cup of hot coffee, without milk, and with little sugar (60 drachms for 12 cups). After the fifth cup, gurgling was heard; and at the ninth, the hernia returned of itself. No application was made to the tumour, but the patient dipped his hands for a while in iced water,—a kind of *horripilation* resulting. Dr. Durand has repeatedly succeeded by this means, sometimes also applying a compress dipped in sulphuric ether to the tumour.—*Gaz. des Hôp.* 1857, No. 53.

Gutta Percha Paper in Rheumatism and Gout.—Dr. Wetzler, of Aix-la-Chapelle, has given this erroneous name to a substance sold in Paris as "*tissu électro-végétal*," and which he finds to be nothing but plates of gutta percha as thin as paper. These, applied to parts suffering from chronic rheumatism or gout, have in his hands been found exceedingly beneficial, inducing great local transpiration. They are so thin as to cause no inconvenience, beyond their fragility, when applied over joints that are moved. He has also employed them early in cases of gonorrhœal rheumatism. Slight irritation of the skin is sometimes induced, but this is temporary.—*Froriep's Notizen*, 1856, B. iv. No. 14.

Ascarides as a cause of Erotomania.—Dr. Buckingham observed that three-fourths of all the cases of erotomania he had seen were owing to the presence of ascarides in the rectum, and were cured by astringent injections. He also spoke of those forms of leucorrhœa which are sometimes taken for gonorrhœa, and thought they often arose from ascarides crawling into the vagina, where, too, he has often found them in little girls addicted to masturbation.—*Boston Journal*, Feb. p. 60.

Plugging in Epistaxis.—Dr. Coate employs a very simple contrivance. It consists in a piece of pig's gut, eight inches

long, tied at one end, and then turned wrong side out, so that the knot may be on the inside, on a child's silver canula. By this canula it is introduced through the nose to the pharynx, and then blown up and tied an inch or so outside the nose. He often introduces a spoonful of saturated solution of alum into it. It plugs up both the posterior and anterior nares thoroughly; and to remove it, it must be pricked, and gently twisted or drawn out. Dr. C. always keeps a yard or two of gut on hand, in a bottle of diluted alcohol.—*Boston Journal*, Feb., p. 62.

PROVINCIAL CORRESPONDENCE.

IRELAND.

[From our Dublin Correspondent.]

DUBLIN, May 6, 1857.

THE last meeting of the Pathological Society for the session of 1856-57 was held in the Anatomical Theatre of Trinity College on Saturday, the 25th of April, Dr. Corrigan, President, in the chair. Dr. Banks laid before the Society the brain of a woman, aged 48, who had been brought into hospital labouring under an attack of "apoplexie foudroyante." She was quite insensible, the right side was completely paralysed, and she died soon after admission. On dissection the left ventricle of the brain was found distended with blood, of which it contained about four ounces.

Dr. Stokes proceeded to give an account of the symptoms and post-mortem appearances in the case of the late lamented Dr. Ball.

On the conclusion of Dr. Stokes's observations, the President rose, for the double purpose of delivering the final address for the year, and of presenting the Society's gold medal to the author of the best essay on the subject proposed at the commencement of the session, "The Diagnosis and Pathology of Diseases of the Rectum." After some preliminary remarks on the value of the Society, the speaker observed that this society possesses a feature which is peculiar to it, and to which its success is in a great measure due—"I mean," he continued, "the exclusion of mere theoretical disquisitions and of disputations. These, I believe, are most wisely excluded, for they are ill adapted to forward patient investigation and the discovery of truth; and an experience of twenty years in this society confirms that view. Facts as they occur are here laid before you; practical suggestions, arising from careful observation, are given to you; and thus, instead of disputations, in which there is often more room for flippant oratory than for calm thought and sound reasoning, useful facts and deductions impress themselves upon the mind, are remembered, and afterwards well weighed and considered. Another advantage of this arrangement of the society is, that no valuable time is lost, so that in each week of the session, short as is the time of meeting, a large amount of practical information is collected and mutually communicated. But the society has other claims to put forward. The Irish School of Medicine owes to it, I think I may say, the very high status which it holds at present throughout Europe and America. To it are paid the first visits of distinguished foreigners belonging to our Profession who come among us, and thus it has become the means of extending the fame of the Irish School of Medicine to every part of the civilised world. I believe I am not wrong when I state, that scarcely a meeting since the commencement of the society has been held that has not been attended by foreigners of eminence from one part or another of the globe. At our last two meetings we have had visitors from classic Italy and majestic Greece—Greece which reckons among its highest glories, its having been the birthplace of Hippocrates, the father of medicine, the philanthropist, patriot, and physician. More than 2,000 years have passed since he flourished, and his writings, up to this moment, carry the impress of truth and sound observation upon them; his name will be remembered as a physician so long as there is human suffering to be relieved, and that will be so long as the human race exists. Of the anecdotes connected with his life as a patriot, who can forget his refusal in a visitation of plague to leave his native island for the court of an eastern king, although tempted by the offer of boundless wealth and honours, and

his noble answer to the ambassador who sought to tempt him, rendered, as it has been, into verse in our own language:—

"Tell him that these, the pageants of a king,
Can never to my heart such raptures bring,
As those I feel, when, as I journey on,
Some pale youth rises from the wayside stone,
With health rekindling, cheek and palms outspread,
To call down bliss on my unworthy head."

The proceedings of this society are, therefore, to be esteemed not merely in a professional point of view, and as contributing to the advancement of the Irish School of Medicine, but also because they thus become a link which unites our country with every part of the world, where life, and health, and medical science are valued. Such being the success and the results of this society, now in the twentieth year of its existence, and the good it has achieved, I should not be doing justice to my own feelings, and I should be guilty of a very great omission, if I did not remind you, the younger members of the Profession, for the older need it not, that to the exertions of two distinguished members of our own body, to Dr. Stokes and Professor Smith, the origination, the foundation, and much of the success of this society are due. (Applause.) Our society opens its meetings to the medical and surgical officers of our army and navy. They are free to come here, and in a city in which there is always so large a garrison, the value of such a society cannot be overrated. And while we receive valuable contributions from them, from their experience in other climes, we, in turn, give in exchange the information which we have been able, in our respective spheres, to acquire. During the present session, fifty-five communications have been made to this society. The authors neither desire nor stand in need of any eulogy from me, but, if the younger members need any consideration to induce them to estimate highly the value of the society, they will find it in the fact, which I am sure my fellow-members will be glad I recal, that among our contributors this year was one of our late presidents, whom we all so deservedly esteem and respect, (I mean Sir Philip Crampton,) who, notwithstanding the constant occupation of his time, came here, and with that remarkable facility of clear description which peculiarly belongs to him, gave through us to surgery, his practical observations, and chose this society as the most fitting medium through which to diffuse information." The learned President next addressed a few valuable observations to the student portion of his audience, in the course of which he dwelt at some length on the great advantage they enjoyed in being admitted to the meetings of the society. Having, in conclusion, declared that the Council had awarded the gold medal to the writer of the essay signed "Tyro Pathologicus," Dr. Corrigan broke the seal of the corresponding envelope, when it was ascertained that the author was Mr. John Campbell, to whom the medal was then presented with appropriate and complimentary observations.

The last *conversazione* for the present season of the Surgical Society took place at the College of Surgeons on the evening of Saturday, the 18th of April. Mr. B. W. Richardson exhibited under the microscope some very rare and beautiful specimens brought from the arctic regions by Captain M'Clintock, R.N. (brother of the present Master of the Dublin Lying-in Hospital), who has just undertaken the command of Lady Franklin's expedition. Among the specimens were a perfectly clear and transparent section of fossil wood from Baring Island; a transparent section of coal from Melville Island; examples of the *Protococcus nivalis* and *Protococcus viridis* from Beechy Island, with various *Diatomaceæ* from the same region. Mr. Richardson also submitted some very delicate preparations of the crystalline lens, showing the tooth-like processes, as well as some transparent and opaque injections of the kidney. Dr. John Barker showed a number of very beautiful dissections of the common snail, illustrative of its anatomy; and Mr. Tuffnal, the Regius Professor of Military Surgery, exhibited a magnificent dissecting model of the Belle Isle Hospital ship, at present being fitted out for the expedition to China.

The Senate of the Queen's University in Ireland have appointed George Johnstone Stoney, Esq., A.M., Professor of Natural Philosophy in Queen's College, Galway, to the office of Secretary to the University, vacant by the death of Robert Ball, Esq., LL.D. This is an appointment which has given extreme satisfaction, as it is felt to be in accordance with the best interests of the University. Professor Stoney is a man of

the highest scientific acquirements; he gained the "Madden Premium" at the fellowship examination in Trinity College in 1852, a distinction in itself no mean proof of ability, and was for a considerable time the principal astronomer in the Earl of Rosse's observatory at Parsonstown.

The examination for the prize annually given by the Council of the Apothecaries' Hall of Ireland, for the best answering on a subject connected with physiological or pharmaceutical chemistry, was held in the Board-room of the Hall, on Monday and Tuesday, the 4th and 5th of May, the subject for the present year being "The Vegetable Poisons." The prize was awarded to Mr. Robert Hague, of Cavan, and the certificate for distinguished answering to Mr. William Davis, of Dublin.

At the usual monthly meeting of the Association of General Medical Practitioners, held on the evening of Tuesday, May 5, three essays which were sent in, competitive for the prize of five guineas offered some months ago by the association, to be awarded to the best writer on the subject, "Of the Relation which Pharmacy should bear to the other branches of the Medical Profession," were read, and that signed "Hippocrates" having received a large majority of votes, the corresponding sealed envelope was opened by the Chairman, when the author was ascertained to be Mr. Charles Henry Leet, jun., who was accordingly declared the successful competitor.

GENERAL CORRESPONDENCE.

THE AMOUNT OF MORTALITY FROM CHLOROFORM.

[To the Editor of the Medical Times and Gazette.]

SIR,—May I beg the insertion of a few remarks in reply to the letters of Dr. Sharpe and Dr. Barclay, which appeared in your last Number. The objections made by these gentlemen to the statistical propositions in my paper, published on the 25th ultimo, are, first, that as there is no discrimination made in my "table" between the different kinds of amputation, I am not authorized to conclude that there has been an increase of mortality from this operation of late years; and, secondly, that, even granting this increase, there is no proof that it has proceeded from chloroform.

Dr. Sharpe states that thigh amputations are more dangerous than others. This statement is correct, though the difference of danger is not so great as he appears to think; and it is also correct that amputation of the finger is less dangerous than that of the arm or leg. But, although the minor amputations, even including that of the forearm, have been excluded from such calculations on this account, it has not been deemed advisable to make a similar distinction, because there is a difference of danger, in respect to the thigh, as it would so materially diminish the data for comparison. Besides, if the periods compared together be considerable, there will be very little difference between the number of particular amputations occurring in each. What can be supposed more uncertain than the number of cases occurring yearly in the London Hospitals in which amputation is deemed advisable? Yet a table in my former paper shows that in three consecutive years the numbers of these cases were, 144, 150, and 136. What, again, appears more uncertain than the proportion of males and females born? yet, at the end of every year, there will be found very little variation among the children born within that period, from the accurately ascertained ratio between the sexes. If only those cases of amputation were to be compared together which agree in every circumstance, the obtainable data would be so few in each division as to render any useful inference impossible. Of this Dr. Simpson's statistics afford a striking illustration. By comparing together a very few cases of thigh amputation, of which one set were selected cases, he arrived at the conclusion that 190 lives are saved out of every thousand such operations by chloroform. It would hardly be a greater mistake to conclude from two cases perfectly similar, one fatal and the other successful, that the plan adopted in the latter would always succeed, and that in the other prove always fatal.

It is the very purpose of statistics to collect together a great many data, in order that minor dissimilarities may be balanced and rendered of no importance; and nothing can be more erroneous than Dr. Barclay's proposition, that from

thousands of amputation cases, without more discrimination between them than I have given, no useful inference can be drawn. It is the old and often-refuted objection to Medical statistics. To account for so large an increase of mortality as ten per cent., and this increase spread equally over a period of three years and a-half, and occurring without exception in every large Hospital furnishing a return, by the supposition of a difference in the danger of the various amputations in the different comparative periods, would be preposterous. It may happen, indeed, in respect to amputations, that some extraordinary occurrence might, for a time, increase or diminish the average mortality; and it is possible that since the improved working of railroads there may be fewer of those severe accidents requiring primary amputation; for I find, by comparing the returns of the same Hospitals in the first and second of my tables (*Medical Times and Gazette*, October 25, 1856), that in the period preceding etherization there were in these Hospitals nearly double the proportion of primary amputations. But, though this would tend to show that I have made the increase of mortality less than it has really been, I have no desire to strengthen my argument by it.

I have assigned chloroform as the cause of the great increase of mortality after the severer operations, from its having proved itself to be a virulent poison, by the numerous sudden deaths that have followed its administration; from the great and lasting prostration that is so often produced by it; and particularly from the frequent observation that this prostration and other allied symptoms have continued until the death of the patient. Nor can any other plausible cause be assigned for the increased mortality. Dr. Barclay, nevertheless, cannot find a shadow of evidence that chloroform had anything to do with the increase! It was not until upwards of fifty deaths had occurred that certain Surgeons would admit that chloroform could be suddenly fatal. He says, "The correlation must be proved by individual examples in which the cause and effect are brought into distinct correspondence." Mr. Mouat, Deputy-Inspector of Hospitals, who had charge of the wounded at the Redan, has informed us (*Medical Times and Gazette*, August 30, 1856,) that he witnessed many consecutive deaths from chloroform in the Crimea, "the patients gradually sinking and dying from exhaustion in from twelve to twenty-four hours;" and M. Chassaignac, Surgeon of the Hôpital Lariboisière in Paris, has, still more recently, given evidence to the same effect:—"In certain patients," he says, "the action of chloroform has consecutive effects, not far removed, but which, nevertheless, do not produce their peculiar dangerous consequences until sixteen, twenty-four, or forty-eight hours. It would seem, in these cases, that the injury done to the vital forces by the chloroform has been so profound that the patient could not recover from it." Does Dr. Barclay see no proof of the "correlation" he requires in these examples? and will he contend that an agent which produces such effects in some instances is not likely to produce a dangerous influence in others predisposing to pyæmia and other fatal morbid conditions, although these effects may not always be manifested by symptoms? Is the "correlation" nearly so well proved between cause and effect, when death is the undoubted consequence of the patient breathing impure air? Can any one doubt, after these facts, the power of chloroform to produce such effects, when he knows that it has been universally administered in large doses, and in every condition of the system? We are, in fact, told by one deemed an authority on the subject, that extreme prostration and disease of the heart, far from being objections to the use of chloroform, are conditions in which its use is especially useful!

Dr. Barclay's admission that Dr. Simpson's statistical fallacies have been exposed, will not be agreeable to many of the advocates for chloroform, for it was on the understanding that there was a saving of life, on the whole, that they founded their defence of the numerous deaths occurring suddenly from its use. And I cannot refer to this point without noticing the difference between the avidity with which Dr. Simpson's doctrine of the influence of chloroform on the results of operations was received, and the obstinate resistance to the same doctrine when these results are shown to be of a very different character from what was supposed. I do not agree with Dr. Barclay, in thinking that there is a general ignorance of the systems and rules of logic in the Profession, though few choose to make a parade of its jargon; but logic will not

always eradicate prejudice, nor supersede the influence of example and authority.

But if Dr. Simpson's fallacies be exposed, if there be no proof of any ultimate saving, what apology are we to make for the fatal class of cases described by Mr. Mouat and M. Chas-saignac, and for those sudden deaths produced by chloroform in operations which might have been rendered painless by other, and perfectly safe means, of a local character? To bring proof of an ulterior mortality after the severer operations of ten per cent., may almost be reckoned a surplusage of evidence, when we have a defence to find for the deaths that are immediately or primarily produced by it. In the letter which I am answering, mention is made of the present controversy respecting tobacco. Does the Surgeon who has taken so conspicuous a part in this dispute think that chloroform was not more abused than tobacco has ever been, when, on two fatal occasions, it was employed at St. Thomas's Hospital for the amputation of a finger and the extraction of a toe-nail?

May 11, 1857.

I am, &c.

JAMES ARNOTT.

PEPSINE VERSUS LACTIC ACID.

[To the Editor of the Medical Times and Gazette.]

SIR,—Your correspondent, whose letter you published last week, evidently imagines that the swelling up of the fibrine, caused by the lactic acid, is a stage of digestion. It has been long known that fibrine on the addition of dilute acids will swell up, but no one ever presumed to call that a digestive process, or an approach to one. It has been equally well known that pepsine by itself will not do this.

But the simple swelling up of our food is not the effect we wish to produce: what we want is digestion. And, having stated that the swelling up is not digestion, I will proceed to give a brief summary of what digestion is. It is the solution (not distension) of solid foods, accompanied by a change in their chemical character.

This effect, as regards the plastic or albumenoid constituents of food—the most important for the nutrition of our bodies—is normally effected by the gastric juice.

The gastric juice consists (if we exclude a very minute amount of extractive and saline matter), of pepsine, and (according to the animal), of hydrochloric or lactic acid, dissolved in a considerable amount of water; neither of these constituents separately is capable of producing the least amount of digestion. But the pepsine *plus* either of the acids, as we daily know to our great comfort, is capable of doing so very effectually. That these are the main constituents of the gastric juice has been long ago shown by the researches of Dr. Beaumont, Berzelius, Graham, and a host of other authorities, too high to be nullified by your correspondent's solitary and not very original experiment.

It is of these two principles (pepsine and lactic acid), that "Boudault's pepsine" consists. Lactic acid, on account of its non-volatility, was chosen to mix with the powder in preference to the volatile hydrochloric acid; which latter, of course, would not be consistent with a dry preparation. If specially desired in cases where the gastric juice is found to be deficient in pepsine (its normal acidity remaining unimpaired), another preparation, containing pepsine without the acid, is made by M. Boudault, and separately designated to distinguish it from that ordinarily known as "Boudault's Pepsine."

In cases where there is a deficiency of acid alone, the researches of Professor Graham have placed beyond a doubt, that hydrochloric acid would be as good, and perhaps better, than lactic acid.

I stated above, that the digestion of the albumenoid constituents of food, as effected in the stomach, was their solution, accompanied by a change in their chemical characters. When thus changed, they are ready for assimilation by the vessels of the alimentary canal, and are called "peptones." I shall here adduce a few simple experiments to show what peptones are, how they differ from undigested albumenoid matter, and that "Boudault's Pepsine" is able to effect this highly essential change.

These experiments are such as may be repeated by any one who is desirous of testing them.

1. 100 grains of coagulated albumen (white of egg) were placed in a filtered solution of "Boudault's Pepsine" (15 grains to the ounce of water). After digesting for 12 hours, at 100° Fah. the albumen had lost 40 grains.

2. 100 grains of coagulated albumen were placed in a filtered solution of Boudault's so-called "Neutral Pepsine" (15 grains to the ounce), containing no lactic acid, but to acidulate which, 12 drops of hydrochloric acid were added. At the end of six hours the albumen was entirely dissolved. On examining the solution after the process, it was found to possess all the characters of a solution of "albumen-peptone;" not precipitable by boiling, changed yellow by nitric acid, &c.

3. 100 grains of coagulated albumen were placed in a solution of 20 grains of lactic acid in an ounce of water; after remaining 12 hours, the albumen had increased in bulk, but none of it had dissolved; and, on examining the fluid, not even a trace of albumen-peptone could be found.

The same temperature was preserved throughout each experiment, viz., 100° Fah., by means of a water-bath, carefully heated.

Any one wishing to investigate the matter will find, in the second volume of "Lehmann's Chemistry," translated by the Cavendish Society, an excellent account of pepsine and the peptones, as well as the tests employed for them. As to its being a "daring assumption to call it pepsine, because no chemist has succeeded in isolating it," I will refer your correspondent to the well-known fact, that fluorine and calcium, long before these were isolated, had their equivalents set, many of their properties known, and their existence altogether so well established, that no sensible man ever thinks of calling it in question; nay, it is a matter of doubt whether the former has been isolated yet.

I will even refer him to his very authority—Lehmann—who, although he states, not that pepsine has never been isolated, but that "pepsine sufficiently pure for chemical analysis has never been exhibited," does not hesitate to talk about pepsine, and describe its properties.

"Boudault's pepsine" is, for all intents and purposes, "dried gastric juice;" dried for the purpose of at the same time rendering it more portable, and, what is of much greater importance, infinitely less liable to decomposition. That this drying is advisable, I think all medical and scientific men will at once agree, on account, on the one hand, of the well-known speedy putrescence of all animal principles when kept in a wet or liquid state (unless retarded by the admixture of some antiseptic, which admixture is in this case hardly to be desired), and on the other, of the great comparative stability if dry. That the drying of pepsine can be conducted in such a manner that it remains unaltered in the slightest degree, is proved by its great digestive powers when redissolved.

I have, in the above, more particularly alluded to Boudault's pepsine, because that was the preparation particularly attacked by your correspondent. I have limited myself, in my part of the discussion, purely to the therapeutical and scientific bearing of the question, and should think it beneath me to descend, in the discussion of a matter of such great and universal interest as the relief of indigestion, to personalities, which I regretted to see your correspondent indulged in.

I am, &c.

W. STEVENS SQUIRE, Ph.D.

277, Oxford-street.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, April 21, 1857.

Dr. WATSON, President, in the chair.

Dr. WILLIAM OGLE exhibited

AN ENLARGED BRONCHIAL GLAND, WHICH HAD PRESSED UPON THE TRACHEA.

The gland was as large as an egg, and had pressed upon the trachea at the bifurcation of the bronchi. The patient was a child aged twelve months. The prominent features of the case throughout were, respiration quick, with effort; prolonged expiration, accompanied by a laryngeal noise, which ever and anon became a ringing cough. Respiration more quiet during sleep, the child lying on its back, but the prolonged character of the expiration was never absent. Percussion (four months before death) universally dull, except over right apex anteriorly. He gradually lost flesh. Six weeks before his death he cut his only tooth; from about the same time had diarrhoea,

and fell away more rapidly. A week before death, paralysis of right arm, with dilatation of right pupil, and unconsciousness. Head not examined. Larynx healthy. Every lobe of both lungs studded with tubercles in clusters. These were more plainly felt, but not more numerous in the upper lobes, which were more emphysematous than the lower. The middle lobe of the right lung was hepatized; the lungs were generally blanched, with comparative congestion of their posterior aspects. There were two vomicae, containing fluid pus in the upper lobe of the left lung. A few of the mesenteric glands were converted into tubercle. The liver, kidneys, with the body generally, very pale. Till within six weeks of death the child was lively, and but for the struggling for breath and the flaccidity of its limbs was surprisingly happy. The specimen may be seen at St. George's Hospital.

Mr. THOMAS SMITH showed a specimen of a

TUMOUR OF THE BREAST.

The breast had been removed by Mr. Paget from a patient, aged 63. It had been noticed during eighteen months, and before excision exhibited the ordinary features of hard cancer. The skin over the disease was adherent and slightly drawn in, but the nipple was not retracted; the axillary glands were not affected. On section a circumscribed growth was found lying just beyond the outermost border of the gland, presenting to the naked eye the appearance of colloid cancer. Microscopically it was found to consist of a stroma, having a colloid structure, intermingled with which were numerous cells of medullary cancer, either scattered irregularly or projecting by villous processes into the interspaces of the colloid tissue.

Mr. HULKE exhibited a specimen of

MALIGNANT DISEASE OF THE EYEBALL,

The eye had been removed by Mr. Bowman in the Royal London Ophthalmic Hospital on the previous Tuesday. The patient was a female, aged 32. The lens and humours being clear, a vascular growth could be seen in the bottom of the eye. With the ophthalmoscope the vessels of the retina could be distinguished by their arrangement and arborization from those of the morbid growth, which were larger, and cropped out at various points on its surface.

After removal the encephaloid mass was found to fill the back of the globe. It had been developed in the choroid, and had split it into two layers, by which it was inclosed. The retina was carried forwards on the anterior surface of the humour. The minute structure was that of encephaloid cancer, approaching in parts a melanotic type. In this case the presence and arrangement of the vessels, as seen with the ophthalmoscope, clearly indicated the nature of the disease and its exact situation.

Mr. CALLENDER brought forward a specimen showing

A RUPTURE OF THE THORACIC AORTA.

The heart, with the exception of some dilatation of its left cavities, presented a natural appearance. The aorta was dilated throughout, and its walls were the seat of atheromatous degeneration. Three inches below the origin of the left subclavian there was a transverse rent, about an inch in length, extending through the inner and part of the middle coats; through this the blood had forced its way, tearing up the layers of the middle coat, below as far as the origin of the renal arteries, and about as high as the subclavian. A quantity of coagulated blood distended the outer coat, and formed a tumour which lay to the left of the ascending aorta and behind the root of the left lung. At the lower part of this swelling a small opening communicated with the interior of the artery, and had allowed of the escape of a large quantity of blood into the left pleural sac. The other organs were natural. The aorta was removed from the body of a middle-aged woman, who, after a severe strain, had complained of pain about the back. This subsided, so that seven days after admission into St. Bartholomew's Hospital, she was able to be up and about the ward apparently in good health. The same evening, while in the closet, she suddenly fainted, and was dead before assistance could be obtained.

Dr. MARKHAM next brought before the Society a specimen of

DISEASE OF THE AORTIC VALVES.

He thought that it illustrated one of the modes of origin of valvular diseases not frequently observed. The valves are all incompetent. Two of them are partially destroyed by

ulceration; and two are also partially fused together, there being a puckering of the structures and a calcareous nodule on the upper side of one of them. The aorta itself, and the lining membrane of the heart and the other valves, are perfectly sound. The left ventricle is greatly hypertrophied, but evidently as the consequence of the valvular disease. Thus the original disease is limited to the aortic valves; and it is clearly not of an atheromatous nature. During life, Dr. Markham had thought that the valvular disease was atheromatous, because the subject of it had never suffered from rheumatism or kidney disease; but the post-mortem examination rendered this view unsatisfactory.

On more strict inquiry from the man's wife as to the history of his disease, it was found that he had been somewhat ailing for ten years, and had suffered from scrofulous affection of the elbow-joint and of the jaw; but that he was nevertheless a very active man, being an excellent runner; he was wont, indeed, to boast of his good wind. He was forty-four years old. Eight months before his death, he was suddenly seized with a violent pain in the left side while running quickly on a message; he reached home with difficulty, and then the pain gradually subsided. From this moment his breath was never right. Dr. Markham saw him about five months after this; and then found clear signs of hypertrophy of the heart, and defective aortic valves. The usual symptoms of cardiac disease, after many violent angina-like attacks, at length destroyed him. Is it not fair to conclude that the cardiac disease dated in this case from the injury which the aortic valves may have suffered at the time when the pain was felt in the side, and which resulted from the inordinate exertion thrown upon the circulating apparatus? It may, perhaps, be doubted whether perfectly healthy valves could give way under such conditions; and the scrofulous taint in this man may explain their weakness.

Dr. SALTER exhibited specimens from a case in which had occurred

NUMEROUS FRACTURES; OF THE HUMERUS, FEMUR, AND OTHER BONES.

The specimen comprised the bones of a child, in whom six of the long bones, the left humerus, the left tibia and fibula, the right femur, and the right radius and ulna were fractured, without any violence or accident, and apparently from degeneration of the structure of the bone at the part fractured. The child, two years and a half old, had been brought among the out-patients to Charing-cross Hospital, three or four days before, powerless, and evidently in great agony, uttering constant piercing cries. The cartilages of its nose had ulcerated away, leaving, instead of the nose, a hole occupied by a scab, and imparting to the face the syphilitic aspect. The cartilages of the ears too, and part of the external meatus, were also ulcerated away, both sides alike. From the bend in the elbow of the left arm matter was running freely; the seats of the other fractures were hard, swollen, and tight, as if there was matter deep seated, but there was no discharge. The child died the next day. At the post-mortem all these fractures were verified—the fractures were nearly transverse, the bone did not seem diseased except in the immediate vicinity of fracture, but some of the bones seemed to have a perfectly normal hardness and density. At and near the points of fracture the periosteum was thickened and detached from the bone. There was no history of syphilis, and of struma only very remotely. Dr. Salter had been able to get only a very imperfect history of the case, but he promised at a future meeting to make it more complete, and to supply a particular account of the textural condition of the diseased parts.

Mr. HENRY exhibited

A FIBRO-CARTILAGINOUS TUMOUR FROM THE NECK.

He had removed it from the neck of a boy, aged 19. It had been growing, in spite of treatment adopted in the country, for four years, but had given rise to little pain or inconvenience. It was the size of a large double walnut, nodulated, very dense, especially at a sort of nipple-like process at the lower part, movable, and filled up the space behind the angle of the lower jaw on the right side. It lay in contact with the large vessels of the neck, but was removed without difficulty, requiring only a little care on account of branches of the portio dura, which transversed it superficially. On section it was found to be composed of dense fibro-cartilaginous

material, which exhibited under the microscope the usual elements of fibrous growth, together with imperfect gland tissue, and at the lower nipple-like process before spoken of true cartilage cells. It might be a question whether the growth had commenced in one of the superficial glands of the neck, or whether it was an entirely new formation, in which imperfect gland tissue had become developed by the process of irritation. At all events, these fibro-cartilaginous tumours are quite distinct from the usual glandular enlargements met with in the cervical glands; and there is no evidence to show that they are connected with any scrofulous or specific diathesis.

Dr. SNOW BECK showed a specimen from a case in which death had occurred after

INJECTION OF AN OVARIAN CYST WITH IODINE.

A. B., aged 28, was admitted into the Samaritan Hospital in January last, suffering from ovarian dropsy, which had been gradually developed during the last eighteen months, and was still increasing. She was in good health, suffered somewhat from dyspepsia, and was very anxious to be relieved from the disease under which she suffered.

On January 19, 1857, the cyst was tapped, and 11½ pints of opaque light olive-green coloured fluid, of the consistency of quince-seed water, evacuated. On standing, the fluid separated into two parts, the lower portion being chiefly composed of the usual corpuscles met with in ovarian cysts. A full-sized trocar was used in tapping the cyst, and when the contents were about half evacuated, an elastic male catheter was introduced well into the cyst, the canula withdrawn, the remainder of the fluid allowed to flow through the catheter, and the iodine injected through it. Three ounces of the tincture of iodine (Ph. Lond.), mixed with an equal quantity of water, were thrown in, allowed to remain three minutes, and the principal part afterwards withdrawn. Considerable pain followed the injection of the iodine into the cyst, and much constitutional disturbance was induced, which subsided in eight days so as to enable her to sit up. The cyst gradually refilled, and on March 2 was again tapped, with the same precautions as before, and 9½ pints of similar fluid evacuated. The strength of the injection was increased to 2 parts of the tincture of iodine and 1 part of water, and again allowed to return after remaining five minutes. Before the whole of the injection was thrown in, very great pain was complained of; the face became pale, a copious perspiration broke out, the pulse was scarcely perceptible at the wrist, and the patient declared she must faint from the severity of the pain. The constitutional symptoms were more marked than after the first injection of the cyst, and attended with some sickness; yet eight days afterward the patient was enabled to leave her bed, and within a fortnight went into the country. On April 17 the cyst was tapped for the third time, with the same precautions as on the two former occasions, 9 pints of a similar fluid removed, and 5 ounces of tincture of iodine (Ph. Lond.) thrown in and allowed to remain. Very great pain was induced by the injection of the iodine; the face became pale, the surface bathed in profuse perspiration, as before; the pulse 104, scarcely perceptible; and in a few minutes she became insensible, in which state she was carried to bed. The senses gradually returned, and during some hours, while partially sensible, she made plaintive cries, as if suffering severe pain. During the night she was constantly sick, and complained of great pain in the abdomen. In the morning I found her perfectly sensible, lying on her back; the whole of the abdomen very tender, her movements expressive of great uneasiness, the breathing short and quick, the skin cold and blue, and the pulse not perceptible at the wrist. She died at a quarter past one p.m. On the examination after death, the whole of the peritonæum was found inflamed. The injection was red and mottled at the lower part; the abdominal cavity filled with light brown transparent serum, which gave distinct evidence of the presence of iodine, and old and fresh adhesions. The ovarian cyst which had been tapped, being in the right iliac region, collapsed, and partially covered by the small intestines, presented no evidence of inflammation, and contained some reddish-coloured mucilaginous fluid, which also gave evidence of the presence of iodine. The walls of the cyst were thick, and presented the red, florid, elevated patches, intermingled with others of a light yellow hue, and some of a calcareous consistence, which has been before met with in these diseases. The left ovary was also transformed into a cyst, the size of a

large orange, and in every way similar to the larger cyst, and had been forced into the pelvis by the pressure of the larger cyst, and bound to its position by firm and old adhesions. The uterus was enlarged, and presented at the orifice the granular appearance of the mucous membrane, so often described as ulceration. The hymen was intact.

Dr. VAN DER BYL exhibited

A LOOSE BODY FOUND IN THE PERITONEAL CAVITY.

It was almond-shaped, about half an inch long, and at one extremity presented a minute projection, probably the remains of a pedicle. The external surface was smooth and shining. On section, this body was found to consist of a firm, semi-cartilaginous capsule, filled with a yellow, pulpy substance, containing gritty nodules. On microscopic examination the contents were found to consist of fatty granules, and some irregular, hard (mineral) masses, requiring hydrochloric acid for their solution. This body was found in a female subject, lying loosely in the cavity of the pelvis. On examining the one of the appendices epiploicæ attached to the sigmoid flexure, it was found much altered in structure, resembling, in fact, the body just described; and it was attached by a very small pedicle, so slender, indeed, that a very slight force might have detached it. There can, therefore, be little doubt but that the body just described had resulted from a degeneration of one of the appendices epiploicæ, and its subsequent separation.

Dr. VAN DER BYL also exhibited other specimens illustrating the formation of

LOOSE BODIES IN THE ABDOMINAL CAVITY.

These specimens were found in a male subject, and consisted of two of the appendices epiploicæ attached to the transverse colon. They were both much altered in structure, about three-quarters of an inch in length, slightly flattened, and furnished with very slender pedicles. The one was very firm, and presented a semi-cartilaginous consistence; the other was dark-coloured, and appeared to contain blood. It is quite possible that, owing to the constriction of the pedicle, a vessel had burst, an accident which might aid the degeneration of the fatty appendix. In Volume VI. of the Pathological Society's Transactions, Dr. Van der Byl has described a body which he believes was formed in the manner he has endeavoured to illustrate. In connexion with this subject, Dr. Van der Byl alluded to the loose body removed from a hernial sac by Mr. Shaw; and stated that, in the *Lancet* for 1850, Vol. I. p. 187, there is described "a large concretion lying loosely on a hernial sac," which was exhibited at the Westminster Medical Society by Mr. Canton, and which exactly resembled that exhibited by Mr. Shaw.

WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, MAY 1.

S. A. LANE, Esq., President, in the Chair.

ANNUAL MEETING.

After the confirmation of the minutes the report of the Council was read by the Secretaries, and the election of officers for the next session took place, viz., *President*, S. A. Lane, Esq.; *Vice-Presidents*, Dr. Seaton, Dr. Fuller, Mr. Martyn, Mr. Keen. *Council*, Mr. Thorn, Mr. Dickinson, Mr. Stevens, Mr. Barnes, Dr. Barclay, Dr. Traquair, Dr. Fincham, Dr. W. Ogle, Mr. Taylor, Mr. J. R. Lane, Dr. Aldis, Mr. Hatfield. *Secretaries*, Dr. Baines, Mr. Milner. *Treasurer*, Dr. Seaton. *Auditors*, Mr. Webb, Mr. Thomas Dickinson.

The PRESIDENT addressed the Society, congratulating its members upon the satisfactory nature of the report, and thanking them for the honour of again electing him as President of the Society. He passed on to the present aspect of Medical affairs, and offered some remarks upon the subjects of syphilization, and the removal of articular surfaces as a substitute for amputation. Upon the former subject he stated the nature of the operation, and gave a complete history of its introduction into practice. He alluded to Hunter's experiments, to the observations, etc., of M. Turenne, Signor Spirino, and of M. Bec; and, though he did

not recommend it to be used, yet he considered that syphilization did answer its end, and prevent the subject from further contagion. He then alluded to the removal of articular surfaces in conservative Surgery, and expatiated upon the advantages to the patients of this mode of operation over amputation.

A *conversazione* followed, at which were exhibited several beautiful objects of the photographic art, many of the new drugs, pharmaceutical preparations, and surgical instruments.

The Society adjourned at 10 p.m.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF LORDS, MONDAY, MAY 11.

THE SALE OF POISONS.

Lord CAMPBELL wished to call the attention of the house to the necessity of further regulations with respect to the sale of poisons. He knew that the Secretary of State for the Home Department had been actively employed for some time past in obtaining information upon the subject, and he believed the right hon. gentleman had collected a great deal of very valuable information upon which some measure might be introduced. Legislation ought to be directed, not only against the administration of poison by design, which had received a salutary check, but against the administration of poison by accident. Some precautions were absolutely necessary to prevent the recurrence of cases of poisoning by mistake.

The Lord CHANCELLOR said, the subject had received the careful consideration of the Government, and a Bill would be introduced in a few days by the Secretary of State for the Home Department. The subject was beset with difficulties. When a dozen poisons were enumerated the ingenuity of chemists discovered as many more, and it was almost impossible to define the limits of medicines and poisons. It was intended to take precautions both against wilful and accidental poisoning; and, if the bill did not wholly remove, it would materially mitigate, the evils of which complaint was made. (Hear.)

HOUSE OF COMMONS, MAY 8.

CHAIR OF MILITARY SURGERY AT THE UNIVERSITY OF EDINBURGH.

Mr. BLACK asked the Secretary of State for the Home Department if it was the intention of the Government to make an appointment to the chair of military surgery in the University of Edinburgh, which had been vacant for more than twelve months.

Sir G. GREY said that the appointment lay in the hands of his noble friend the Secretary for War, who had selected an officer for the purpose. That gentleman would, he believed, enter upon the discharge of his duties on the 15th inst.

Mr. FAGAN gave notice that he should move for a select committee to consider the laws relating to the relief of the poor and medical charities in Ireland.

MONDAY, MAY 11.

GENERAL BOARD OF HEALTH.

Sir G. GREY moved for leave to introduce a Bill to make better provision for the exercise of the powers of the General Board of Health. The right hon. baronet in doing so took occasion to observe that the Board had originally been created in the year 1848; its members having then consisted of the First Commissioner of Woods and Forests, and two other gentlemen appointed by the Crown, one of whom was in the receipt of a salary. The original Board had, however, been dissolved in the year 1854, and a new Board had been constituted, having at its head a President, who received a salary of £2000 per annum, he being the only paid member of the Board. By virtue of the Act under which the department had been instituted its powers were to continue until the 29th day of July next, and until the end of the next ensuing session of Parliament. Paying regard, however, to the ordinary duties which the Board had to perform, the Government had come to the conclusion, instead of proposing a renewal of the existing Board, to dispense with it as a separate department, and that such portion of its present duties as it was desirable should continue to be discharged should be transferred to the Council-office to be performed by the Lord President,

with the aid of a committee of the Council. If the House should agree to that proposal an immediate reduction of £3000 or £4000 per annum in the expenses of the department would be the result, while a still greater reduction might after some experience of the working of the new system be effected.—Leave was then given to bring in the Bill.

LUNATIC ASYLUMS (SCOTLAND).

In answer to Mr. E. Ellice,

Sir G. GREY stated that the report of the commissioners appointed to inquire into the state of lunatic asylums in Scotland would be printed in the course of a few days.

WEDNESDAY, MAY 13.

MEDICAL PROFESSION BILL.

Mr. HEADLAM moved for leave to bring in a Bill to alter and amend the laws regulating the Medical profession. In doing so, the hon. member stated that its general character was the same as that of the measure which he had introduced upon the same subject last session. Its main object was to insure uniformity of education throughout the whole kingdom in the case of Medical men. It further provided that persons who had passed the required examination in one portion of the country should possess the right to practise their profession in any other portion of it; and also that there should be a perfect system of registration, so that the public might be enabled to ascertain, with as small an amount of trouble as possible, whether any particular person was or was not a legally-qualified Medical Practitioner. These were the three principal provisions of the Bill, and he should only add, that the machinery by which he proposed to carry them into effect had met with the general approval of the Profession.

Mr. COWPER admitted that the subject of the Bill was one of great importance, and was glad to hear that it had met with the approbation of that Profession, the interests of which it to so great an extent affected. The State had taken upon itself to prescribe what should be the qualification of Medical Practitioners, but the laws by which the nature of that qualification was regulated were chiefly derived from old charters, and the whole subject was as a consequence in a somewhat anomalous condition. The qualifications required were as various as was the area over which those qualifications could be exercised. There were, for instance, the College of Physicians and the Universities of Oxford and Cambridge, both of which held different views upon the matter. There was again the College of St. Andrew's, in which a system of a character distinct from the institutions which he had just mentioned prevailed. With respect to the area, also, a very great anomaly existed. The College of Physicians, for example, were enabled to give a licence to practise medicine within the metropolis and for seven miles around it only, while those who obtained licences at the universities might practise throughout the whole kingdom. The college at Glasgow could give licences to practise over only four counties, and there were sixteen colleges in the United Kingdom, the diplomas of which entitled holders by law and usage to practise only medicine. With respect to surgeons, he might observe that, legally speaking, there existed, in their case, no distinct qualification. What was, generally speaking, meant by the word "surgeon" was a member of the College of Surgeons, but that was not the legal definition of the term; and it was, in his opinion, extremely desirable that the State, having the power to grant licences to Surgeons as well as to Physicians, should do it effectually, and should not allow anybody to practise that Profession without having given proof of competent skill in his art, as well as that he had received a fair general education. (Hear, hear.) As things at present stood, there were to be found, among Licensed Practitioners, men who were incompetent, not alone so far as related to matters connected with their profession, but who possessed but a very small acquaintance with general subjects. The reason which was alleged, by way of accounting for that fact was, that the demand for General Practitioners was so great, that if a high standard of competency were fixed as necessary before they could obtain a licence, the supply would not be equal to the demand, and the rural districts would, to a great extent, be deprived of the services of Medical men. Experience, however, in his opinion, tended to show that such would not be the case, inasmuch as it was quite clear that what he might term over-competition now prevailed in the Profession, as was clearly shown by the circumstance that Medical men were, in many instances, found to be ready to take, under the Poor-

law Board, salaries which the authorities themselves regarded as being scarcely a sufficient remuneration for their services. With reference to the Bill before the House, he could only say that he was disposed to look upon it with favour, introduced, as it had been, under such favourable auspices, as emanating from an hon. member who had taken great pains with the subject. (Hear, hear.) The views of the Committee which had sat some time ago, and of which he (Mr. Cowper) was a member, embraced the necessity of uniformity of qualification, and of fixing a minimum standard, without having attained, to which no one could obtain a licence to practise. In order to come up to that standard, it was necessary that a Surgeon should know something of medicine, and that a Physician should be in some degree acquainted with surgery, while it was left to the Medical colleges to adopt a higher standard in reference to the particular knowledge appertaining to any one branch of the Profession. These were the objects which he thought it was desirable to carry into effect in any legislation upon the subject, and in so far as the Bill of his hon. friend tended to that end, he should give it his cordial support. (Hear, hear.)

Lord ELCHO said, it had been remarked by the late Sir R. Peel that there was scarcely a session without a Salmon Bill, and in his (Lord Elcho's) opinion the same observation might very well be applied to the Bill before the House. He, however, did not rise to offer any opposition to the Bill, but simply to put a question to his hon. friend, by the answer to which his course with respect to the subsequent progress of the measure would be guided. Before he put the question he should say a few words in explanation of its nature. His hon. friend had introduced a bill in the penultimate session of the last Parliament which had been committed, but which in committee had been found to require so much amendment that it had been deemed desirable to have it withdrawn for further consideration. It entirely ignored the position of an M.D. of one of the Universities, and had been characterised by the hon. member for Surrey as a Bill to provide for certain bodies corporate at the expense of our corporations. (A laugh.) Well, the Bill had subsequently been referred to a select committee, which had sat several weeks, and which had effected so great an alteration in the provisions of the measure that scarcely a line of the original remained. The Bill thus changed had come down from the committee, and their report had received the unanimous assent of the House. Now, he thought the most practical step which the House could adopt would be to take up that Bill again and to pass it into a law. The question he had to ask was whether this Bill was *bonâ fide* the Bill of the committee? It was possible enough that there might be a unanimous feeling among the Medical corporations in favour of this Bill, without a corresponding unanimity among the great body of the Profession; and he was very much afraid that the tendency of the hon. and learned member's Bill was to benefit the corporations at the expense of the Universities. Now, the Medical education given in the Universities of Scotland and in the University of London was about the best in the United Kingdom, and their degrees were a far better test of a Medical man's qualification than the examination before any of the colleges. The degree of Doctor of Medicine of the University of London carried more weight with it than that of Member of the College of Physicians, yet an M.D. of the University of London was prohibited from practising within seven miles of the metropolis. If the Bill were *bonâ fide* the Bill of the Committee, he was ready to give the hon. and learned member his humble support, but if it differed in any essential respect he should ask leave of the House to lay upon the table to-morrow the Bill recommended by the Committee.

Mr. HEADLAM said that his Bill was not brought forward by the Medical colleges, but originated with a number of Medical gentlemen, having Sir C. Hastings at their head. These gentlemen, so far from being friendly to the colleges, were rather antagonistic to them. When the Bill was coming on the College of Physicians went to the Home Secretary, and induced him to offer objections to the Bill going into Committee. In one material point—namely, in the appointments which the Bill of the Committee proposed to vest in the Government—the present Bill, he admitted, differed from that of the Committee. The noble lord could, however, move any amendments when the House went into Committee on the Bill.

Mr. NAPIER hoped that every facility would be given to the

passing of this measure. It was clear that, in order to frame a good practical measure, there must be a good deal of concession on the part of opposing interests. Ireland had long been particularly proud of her medical education, and Trinity College, Dublin, the Colleges of Physicians and Surgeons in Ireland, and the Queen's University were agreed in favour of the present measure. The Bill, therefore, had a fair chance of being accepted by the profession, and by securing a uniform system of medical education it would do much to elevate the character of the medical profession. (Hear.)

After a few words from Mr. CRAUFORD,

Mr. BLAOK, as a member of the Committee, said, he regretted that the measure they had recommended had not been laid on the table as the foundation of any legislation on this subject.

Lord ELCHO did not suppose that the intention of the hon. and learned member had been to favour the medical corporations, although he feared his Bill would have that effect. He should ask leave to-morrow to bring in a Bill on the subject. (Hear.)

Leave was given to bring in the Bill, which was read a first time.

ROYAL COMMISSION—MEDICAL DEPARTMENT OF THE ARMY.

WAR-OFFICE, MAY 8.

THE Queen has been pleased to issue a Commission under her Royal Sign Manual, of which the following is a copy, to inquire into the organization, government, and direction of the Medical Department of the Army:—

Victoria, by the grace of God of the United Kingdom of Great Britain and Ireland, Queen, Defender of the Faith,

To our right trusty and well-beloved councillor, the Right Honourable Sidney Herbert; and to our trusty and well-beloved Augustus Stafford Stafford, Esquire; Sir Henry Knight Storks, Knight Commander of the Most Honourable Order of the Bath, a Colonel in our Army, and Secretary for Military Correspondence in our War Department; Andrew Smith, M.D., Director-General of our Army Medical Department; Thomas Alexander, Companion of the Most Honourable Order of the Bath; Sir Thomas Phillips, Knight; James Ranald Martin, Esquire, F.R.S.; Sir James Clark, Baronet, M.D.; and John Sutherland, M.D., greeting;

Whereas it hath been humbly represented to us that, considering the great importance of maintaining and improving the health of all ranks of our army, at home and abroad, and of providing for their medical care and treatment in cases of disease, wounds, and other casualties whatsoever, in the most approved manner, it is expedient that certain inquiries should be made into the constitution of the Medical Department of our army, the mode of appointment of its officers, and the system which regulates their rank, pay, promotion, and retirement; likewise it is further expedient to examine into the condition and administration of the hospitals of our army; with a view to their increased efficiency.

Now know ye, that we, having taken into our consideration the premises, do hereby order and direct you, the said Sidney Herbert, Augustus Stafford Stafford, Sir Henry Knight Storks, Andrew Smith, Thomas Alexander, Sir Thomas Phillips, Sir James Clark, James Ranald Martin, and John Sutherland, to inquire into the organization, government, and discretion of the Medical Department of our army.

And, first, to inquire into the mode by which candidates for first commissions are selected, and the system adopted for their promotion and routine of service; also the mode adopted in regard to their pay and retiring allowances.

And further, we do order and direct you to inquire into the means now adopted for acquiring, keeping up, and adding to the professional knowledge of the officers of our medical department, and to consider whether it will be expedient to encourage them to combine civil practice where compatible with military duty.

And further, we do order and direct you to inquire into the operation of the regulations now in force, with a view to the prevention of disease in our army, both at home and abroad, as regards barrack accommodation, encampments, clothing, rations, and other matters relating thereto, having regard to the various climates to which our troops are exposed, and the

duties and responsibility of the Medical authorities on these matters.

And further, we do order and direct you to inquire into the state and condition of military hospitals, both general and regimental.

Also into the system adopted in the same, or the treatment of our soldiers, and the powers possessed or exercised by the Medical Superintendents or other functionaries in such hospitals, for providing diet, medicines, and every requisite for the medical and surgical treatment of the patients under their charge, together with the character of the diet, medical comforts, furniture, and other hospital supplies.

Also, we do further direct you to inquire generally as to the expenditure of such hospitals, and the financial control now exercised in and over the same, and the relative authority of the various departments whose functions are exercised within the hospitals.

And further, we do order and direct you to inquire into the rules and regulations, or the practice in force for invaliding and discharging the soldiers of our army, when brought forward for discharge, as unfit for further service.

And, further, we do order and direct you to inquire into the system of management and treatment of, and the provision made for patients in civil Hospitals, whether in immediate connexion with our army or otherwise, and to consider whether such management or treatment, or any portion thereof, can be introduced with advantage in the Medical department of our army.

And we further order and direct you to inquire into the expediency of making provision in our military hospitals for the officers of our army suffering from disease or accident incurred in our service, and to consider whether it will be advisable to provide for our military hospitals for the treatment and cure of officers or soldiers, or to establish a separate military hospital or hospitals for that purpose, or in any other manner to provide for the treatment of such cases.

And we do further command and require you to report what changes you may think it expedient to make in the organization, management, and expenditure of the medical department of our army, with a view to the utmost efficiency of this branch of our military service, and what measures you may recommend to be adopted, with a view to the preservation of the health of our troops at home and abroad; and also that you do report your opinion upon such returns of records as should be kept by the Medical officers of our army, with a view to the preparation of a well-digested and accurate body of military medical statistics.

And it is our further will and pleasure that you, or any five or more of you, do obtain information touching the matters aforesaid by the examination of all persons most competent, by reason of their knowledge, habits, or experience to afford it, and also by calling for all documents, papers, or records which may appear to you, or any five or more of you, calculated to assist your researches and to promote the formation of a sound judgment on the subject, and that you, or any five or more of you, do report to us, under your hands and seals, your several proceedings, by virtue of this our commission, together with your opinions touching the several matters hereby referred for your consideration.

Given at our Court at St. James's, this 5th day of May, in the year of our Lord, 1857, and in the twentieth year of our reign.

By her Majesty's command,
(Signed)

PANMURE.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise, May 7th, 1857.

BATESON, JOHN MOSES, Kirkby-Lonsdale, Westmoreland.
CLARK, JOHN MARSHALL, London.

GIRDLESTONE, WILLIAM T., Wordsley, Staffordshire.

INMAN, ROBERT MATTHEWS, Carlisle, Cumberland.

STILWELL, HENRY, Uxbridge.

WOOD, WILLIAM, Siddington, Gloucestershire.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 8th inst. :—

ALDRED, HENRY, Manchester.

ALLEN, JOSIAH, Kidderminster.

BEADLES, HUBERT, Broadway, Worcester.

ELLIOT, JOHN, Kingsbridge, Devon.

MEACHAM, EDWARD, Manchester.

PHILLIPS, EDWARD, Aberystwith.

RODGERS, MAXWELL, Kilrea, County Derry, Ireland.

At the same meeting of the Court Messrs. THOMAS COGHILAN and JOHN CALDWELL passed their examinations for naval surgeons. These gentlemen had previously been admitted members of the College, their diplomas bearing date respectively August 2, 1852, and May 23, 1854.

UNIVERSITY OF ST. ANDREW'S.—List of gentlemen on whom the degree of Doctor of Medicine was conferred, after the May examination :—

ALCOCK, THOMAS, M.R.C.S. & L.A.C., Hyde, Cheshire.

BANNING, R. JOSEPH, L.A.C., Fairfield, near Liverpool.

BARNETT, JOSEPH KNIGHT, M.R.C.S., Walsall.

BARR, W. A., M.R.C.S. & L.A.C., R. Artillery, 3d foot.

BATT, AUGUSTINE, M.R.C.S. & L.A.C., Witney, Oxon.

BLACKMORE, H. P., M.R.C.S. & L.A.C., Salisbury, Wilts.

BRUNEAU, EDOUARD, M.R.C.S., Mauritius.

CHAPMAN, JOHN, London.

DALY, DENIS BOWES, M.R.C.S.I., Navan.

DAVIES, JESSE CONWAY, M.R.C.S., Flintshire.

DAY, WILLIAM HENRY, M.R.C.S., Stratten, Wilts.

GANGE, FRED. ABNER, M.R.C.S. & L.A.C., Essex.

GRAY, THOMAS SCOTT, M.R.C.S. & L.A.C., London.

GRYLLS, WILLIAM RICHARDS, M.R.C.S., London.

HENSLEY, HENRY, M.R.C.S. & L.A.C., Bath.

HUDSON, R. FAWELL, Lic. Fac. Phy. and Surg. Glasgow, Lancashire.

JAMES, MOSES P., M.R.C.S. & L.A.C., Braintree, Essex.

JOHNSON, DAVID, M.R.C.S. & L.A.C., Dudley.

LLOYD, J. H., M.R.C.S. & L.A.C., Anglesey, N. Wales.

MCCORMICK, JOHN, M.R.C.S.I., Donegal, Ireland.

MCLOSKEY, PATRICK, M.R.C.S., Ed., & L.A.C., Rathwell, Northamptonshire.

MCCOSCAR, JOHN, L.A.C., London.

MCWHINNIE, JOHN, Lic. Fac. Phy. & Surg., Glasgow, and M.R.C.S., Royal Navy.

MARSHALL, ALEX. WILSON, Lic. Fac. Phy. & Surg., Glasg., Birkenhead, Cheshire.

MAUGHAM, WM., M.R.C.S. & L.A.C., Carnarvon.

MOULD, THOS. RAWLINGS, M.R.C.S.I., Strabane.

NORMAN, SERGEANT, J. C., M.R.C.S. & L.A.C., Colchester, Essex.

OLIVER, WM. S., M.R.C.S.I., Kilfinane, Co. Limerick.

ORSBORN, JOHN, F.R.C.S., Bittern, Southampton.

PHILLIPS, HENRY J., M.R.C.S., London.

REID, HARRY, Lic. Fac. Phy. and Surg., Glasgow, Torryburn, Fifeshire.

ROGERS, JOSEPH, M.R.C.S. & L.A.C., London.

ROGERS, THOS. LAWES, M.R.C.S., London.

RUSSELL, DAVID, M.R.C.S. Ed. & L.A.C., Birkenhead, Cheshire.

SIM, ROBERT, M.R.C.S., Ed., Edinburgh.

SIMPSON, THOS. PEMBERTON, M.R.C.S., Scarborough.

SMITH, HENRY T., M.R.C.S. & L.A.C., Melton Mowbray.

TAYLOR, FREDERICK BAYNE, M.R.C.S., Brighton.

THANE, GEORGE DANCER, M.R.C.S., London.

VINRACE, JOHN, M.R.C.S., Ashby-de-la-Zouch.

WATSON, WM. WILBERFORCE, M.R.C.S., Scarborough.

WHICHER, JAMES, M.R.C.S., London.

WOOD, HENRY B., M.R.C.S. & L.A.C., Lydd, Kent.

DEATHS.

CLEMENT.—May 5, at Paris, Dr. Charles Clement, Physician to the Civil Hospitals.

COTTON.—Dr. Cotton has been elected Surgeon to the West Norfolk and Lynn Hospital. Our correspondents speak of this as a triumph of orthodox Medicine, as a candidate accused of homœopathic practice was defeated.

DE MUSSY.—Lately, at Paris, Dr. Gueneau de Mussy.

FIFE.—On May 10th, in London, Professor George Fife, M.D. and L.R.C.S. Edin. 1827. Physician, Queen's Hospital, Birmingham, and Professor of Clinical Medicine and Materia Medica, Queen's College, Birmingham.

LAUGIER.—Lately, at Toulon, Dr. Laugier, Second Chief Surgeon to the Hôtel-Dieu at Toulon.

MARSHALL.—On the 21st of March, at Allahabad, Bengal, aged 44, Robert Marshall, M.D., Surgeon, H.E.I.C.S.

ROBINSON.—On the 2nd instant, aged 44, Charles Robinson, Esq., Surgeon, of Middleham. L.S.A. 1834.

SCOTT.—May 4th, at Portland Lodge, Southsea, in the 45th year of his age. Dr. Scott was M.D. of Edinburgh, 1834, M.R.C.S., 1832, and was made a Fellow of the College this year. He was a gentleman as much distinguished for his great professional talent, as he was beloved by all who knew him, for his kindness and benevolence of character. A strong love of his profession, led to unusually early success. He performed the operation of lithotomy upwards of twenty times unaccompanied by a single death. He also performed other operations with a like favourable result—amputation at the shoulder joint, laryngotomy, tracheotomy, &c., &c., He was well known as the senior medical officer of the Royal Portsmouth, Portsea, and Gosport Hospital, an institution in which he took the deepest interest, and which through his talent, rapidly rose to prosperity and eminence. Dr. Scott won the respect and confidence of his richer patients to an unusual degree, while he gained their affectionate regard; but it is the wailing of the poor that will proclaim how full of generous sympathy for their sufferings was his great heart, only too sensitive for the happiness of its possessor.

APPOINTMENTS.

M'DONNELL.—Dr. Robert M'Donnell has been appointed by the Lord-Lieutenant, Medical Superintendent of the Mountjoy Model Prison, Dublin, in the room of Francis Rynd, Esq., resigned.

TESTIMONIALS.

RICORD.—On the occasion of his re-commencing his celebrated clinical course at the Midi Hospital, (a course which has maintained its high popularity for twenty-five years,) M. Ricord's former pupils, now practitioners, presented him with a handsome testimonial, M. Diday delivering it to him with a suitable address. The testimonial consists of a magnificent gold medal, bearing the inscription—"Au nom de la Science et de l'Humanité reconnaissantes." On the obverse—"A. Philippe Ricord, ses Elèves et ses Amis."

VISITATION OF APOTHECARIES' SHOPS.—(Communicated.)

A second Visitation of Apothecaries' Shops in the City, was made on Thursday, May 7th, by the Censors of the College of Physicians, assisted by the Wardens of the Society of Apothecaries. The Censors report that the shops present a generally improved condition, and they have found occasion to express their approval in nearly every instance. Especial care was manifested by nearly all the proprietors of shops to avoid chances of accident when dispensing poisonous drugs. Cautious and ingenious contrivances and devices were observed by the Censors; which, though various in the different shops, all tend to the prevention of accidental poisoning through careless dispensing. Adequate measures to obviate the purchase of poisons for criminal purposes are yet wanting, and are greatly to be desired.

ROYAL MEDICAL BENEVOLENT COLLEGE.—The annual general meeting of this Institution took place on Wednesday last at the Office in Soho-square, the Right Hon. the Earl Manvers, President of the College, in the chair. It appeared by the report, which was read by the secretary, that the institution was making the most satisfactory progress in every way, and was receiving cordial support on all hands. The annual subscriptions during the past year amounted to £2,769; the ordinary donations to £2,876; and the special donations to the chapel fund to £2,760. At the close of the ordinary business, the meeting was made special for the purpose of confirming an agreement entered into between the Council of the College and the Devon and Exeter Benevolent Medical Society for the transfer to the College of £1000 stock on very favourable terms. The proceedings, which were throughout of the most friendly character, terminated with a vote of thanks to the noble President of the College, who occupied the chair.

UNIVERSITY OF ST. ANDREW'S.—Dr. W. T. Gairdner, Lecturer on the Practice of Medicine and on Clinical Medicine, Edinburgh, and Physician to the Edinburgh Royal Infirmary, has recently been added to the staff of Medical Examiners in the University of St. Andrew's.

LONDON UNIVERSITY.—A meeting of the graduates was held on Tuesday the 5th ult., at Freemasons'-tavern, for the purpose of receiving the report of the committee on the proposed new charter. The report having been read and received, Dr. Foster moved, and Dr. Storrar seconded, the following resolution:—"That this meeting, while regretting the introduction into the new charter of important powers, which have not been the subject of discussion as between the senate and graduates, yet understanding that the opinion of convocation is intended to be a practical element in the action of the university, and must, in ordinary course, be declared in respect to any regulations made in pursuance of these powers, authorizes the committee to accept the charter as proposed." The following amendment was moved by Mr. Waley and seconded by Mr. Quain (the barrister):—"That this meeting, viewing with disapproval and alarm the contemplated renunciation by the senate of the principle of collegiate education of arts and laws, and considering such a measure to be a serious blow to regular and systematic education, and calculated to lower the value of London degrees, declines to authorize the committee to accept the charter as proposed by the senate." After an animated discussion, the amendment was carried by a majority of forty-nine, the ayes being eighty-six, noes thirty-seven.

LONDON HOSPITAL.—The 117th anniversary festival of this Institution was celebrated on Wednesday, at the London Tavern; General Windham, C.B., M.P., (of Redan celebrity,) in the chair. From the report of the secretary it appeared that during the year 1856 the total number of in-patients admitted was 4,503, of whom 2,876 were admitted free. Of that number, 3,865 were discharged during the year, 281 died, and in January, 1857, there still remained in hospital 347. The increase of patients naturally involved an increase of expenditure. During the same period the number of out-cases, exclusive of all trifling casualties and other non-registered cases, amounted to 19,321. The gallant chairman, in proposing the toast of the evening, "Success to the London Hospital," in reference to the excess of expenditure over receipts, said that he thought that every man who had seen the noble exertions of the medical profession in the Crimea would be glad to aid in the creation of a shower of nuggets in the form of half-sovereigns in the cause of that branch of science which they had seen so much reason to respect. The subscriptions during the evening amounted to £3,200.

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 9, 1857.

BIRTHS.

Births of Boys, 924; Girls, 922; Total, 1846.

Average of 10 corresponding weeks, 1847-56, 1560.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	542	522	1064
Average of the ten years 1847-56 ... ..	...	...	1040
Average corrected to increased population ... ..	...	...	1144
Corrected average for corresponding week in ten years 1847-56	530.2	510.1	1064
Deaths of people above 90 ... ..	...	...	7
Deaths in 13 General Hospitals	44	24	68

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population. 1851.	Small-pox.	Measles.	Scarlatina.	Hoop-ing-Cough.	Dia-rhoea.	Ty-phus
West	376,427	..	1	4	4	4	5
North....	490,396	2	4	1	8	1	13
Central ..	393,256	..	6	4	9	1	3
East	485,522	..	17	11	12	2	12
South	616,635	..	4	7	11	9	8
Total..	2,362,236	2	32	27	44	17	41

DEATHS REGISTERED DURING THE WEEK.

CAUSES OF DEATH.	In the Week ending Saturday, May 9, 1857.						Averages of Temperature and Deaths in 10 Weeks.
	Deaths of Persons.						
	AT ALL AGES.	Under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.	At 80 Years of Age and Upwards.	
Mean Temperature	44° 8						48° 9
ALL CAUSES	1064	511	152	179	178	44	1040 3
SPECIFIED CAUSES	1062	510	152	179	177	44	1031 5
DISEASES:—							
1. Zymotic Class	183	143	16	12	9	3	210 0
2. Dropsy, Cancer, and others of uncertain scat	57	3	15	18	20	1	46 9
3. Tubercular Class	196	80	68	44	4	..	197 3
4. Of Brain, Nerves, etc. ..	106	50	10	15	26	5	119 3
5. Of Heart, etc.	49	6	9	15	19	..	43 8
6. Of Respiratory Organs ..	208	109	8	32	52	7	175 0
7. Of Digestive Organs ..	53	23	8	14	8	..	65 1
8. Of Kidneys, etc.	20	1	4	6	7	2	13 5
9. Of Uterus; viz. — Puer- peral Disease, etc.	7	..	5	1	1	..	12 2
10. Of Joints, Bones; viz.— Rheumatism, etc.	7	2	1	2	2	..	8 5
11. Of Skin, etc.	2	1	1	..	..	..	2 4
12. Malformations	2	2	..	..	..	..	4 7
13. Debility from Premature Birth, etc.	36	32	..	4	..	..	27 8
14. Atrophy	31	23	..	3	5	..	32 4
15. Age	40	..	..	..	16	24	42 2
16. Sudden	4	2	..	1	1	..	7 0
17. Violence, Privation, etc...	61	33	7	12	7	2	23 4
CAUSES NOT SPECIFIED.. ..	2	1	..	..	1	..	8 8

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29.962 in.
Mean temperature	44° 8
Highest point of thermometer	59° 1
Lowest point of thermometer	33° 0
Mean dew-point temperature	38° 2
General direction of wind	N.E.
Whole amount of rain in the week	0.00
Amount of horizontal movement of air in the week	400 miles.

TO CORRESPONDENTS.

An Annual Subscriber.—On Surgery, the most recent works, not Manuals, are those of Erichsen, Miller, Pirrie, and Syme. There is no modern work on the Practice of Medicine. Watson's Lectures are out of print; Williams's "Principles" appeared recently.

Mr. Overton.—Dr. Winn's paper on the Galium Aparine appeared in the Medical Gazette in 1851.

Dr. Renard.—Many thanks.

A. G., Aberdeen.—We can only repeat our former answer—Apply to the Secretary of the Hospital.

A Correspondent who sends us the circulars of Dr. Williams respecting his Curative Instrument for Spermatorrhœa, and asks, "Can nothing be done to stop this crying shame?" would be a public benefactor if he could suggest a remedy.

Mr. Graham.—Thanks. The case is not forgotten.

The paper of Dr. Dyer, of Aberdeen, on the Importance of the Pulse in relation to Chloroform, shall appear forthwith.

The delay in the appearance of Dr. Jenner's Lectures does not rest with us. A coloured engraving has been ready for some time; but an artist who had promised Dr. Jenner some drawings for woodcuts has disappointed him.

A Rustic.—The following gives the number of cattle imported from different foreign countries into Great Britain during 1855, which is still the latest information given us in the Blue Books:—Denmark, oxen, 17,986; cows, 1928; Oldenburg, oxen, 1702; Hanse Towns, oxen, 7889; cows, 633; Hollaud, oxen, 28,371; cows, 6678; calves, 19,723; Belgium calves, 3547; France, oxen, 2182; cows, 656; calves, 502; Portugal, oxen, 2630; Spain, oxen, 2897; other parts, oxen, 30; cows, 168; calves, 5. Total, oxen, 63,687; cows, 10,063; calves, 23,777.

Statist.—The increase of population during the last twelve months is far greater than in any equal period; for not only are the births more numerous, but the deaths, which had risen to 437,905 for 1854, and 425,703 for 1855, were last year only 391,309.

T. W.—Common usage settles the question when authorities differ, and the *i* is certainly long.

A Chemist will find the report on the uses of chlorate of potass in our Number for August 16, 1856.

Dr. P.—We have a great many valuable contributions, which have been received some months ago; they will appear in due course. In our selection of papers for publication we are guided by their value, the authority of their authors, and their length. Many papers are postponed *sine die*, because authors seem to forget that human life is short.

A Subscriber.—The odour is owing to the presence of asparagine in the urine.

The letter of Mr. Nicholls, of Dublin, with some remarks on its subject, are unavoidably delayed until next week.

A Correspondent has forwarded to us an advertisement, a letter and a pamphlet, all setting forth the extraordinary powers possessed by a Mr. Colston, who describes himself as a member of the College of Surgeons, and whose special vocation at present is to cure all diseases of the ear, of course including deafness, however inveterate, in an incredibly short space of time. We may observe, *en passant*, that Mr. Colston's name is omitted, probably by mistake, from the list of practitioners published in the London and Provincial Medical Directory; and that the nature of the treatment adopted by him is as yet unknown to the world. Of its efficacy, however, Mr. Colston himself positively assures us; and as he disclaims all mercenary motives in the application of his remedies, he requires only 11s. to be remitted to him in a post office order to insure the due conveyance of the necessary medicaments to the afflicted patients. Mr. Colston's letter in answer to a person who applied to him from seeing an advertisement in a newspaper, is a curiosity in its way, for it not only possesses the most deep sympathy for the individual to which it is addressed, but it is actually *lithographed*, in order, perhaps, to be preserved as a memorial of the communication of the writer, or, perchance, to be sent, under similar circumstances, to other sufferers. Mr. Colston, in his pamphlet, earnestly warns the public against the artifices of quacks and advertisers, and in answer to those captious objectors, who may say that Mr. Colston largely advertises himself, he candidly states that he has no other way of making the public aware of the miraculous power which he possesses of curing the diseases of the ear. Mr. Colston also states that he is in communication with many of the Nobility and Members of Parliament on the subject of opening an institution for the performance of his marvellous cures, but he does not inform us whether Lord Robert Grosvenor is among the number of his patrons.

COMMUNICATIONS have been received from—
Professor HUXLEY; Professor TROUSSEAU; Mr. OLDFIELD; Dr. THOLOZAN; Mr. SOUTH; Mr. TOYNBEE; Dr. GIBBON; Mr. TEALE; Mr. SANDS COX; Dr. LANKESTER; Dr. DYER, Aberdeen; Mr. H. H. WATSON; Mr. FLETCHER; Dr. BAINES; Mr. GRIFFIN; Dr. LEON RENARD, Antibes; Mr. CLENDON; Dr. HELPS; Dr. HALL; Mr. STONE; Dr. ARMSTRONG; Dr. PRETTY; Mr. WEBBER; Mr. G. S. CLARKE; Mr. OVERTON; Messrs. CORNISH, BROTHERS; Mr. GROVE; Messrs. DRAY and Co.; Mr. CUNNINGHAM; Mr. GILES; Dr. J. CUTHBERTSON; Dr. HAYDON; Mr. W. CLARKSON; Mr. T. A. WARREN; Dr. W. A. SMITH; Mr. J. G. WALES; Dr. HENDERSON; Mr. W. CALCOTT; Mr. COOPER; Mr. H. E. WATTS; Mr. DOBSON; Dr. CUTHBERTSON; Mr. G. F. WALES; Dr. WHITEHEAD; Dr. DAY; Dr. COTTON; Mr. REED; Mr. FREEMAN.

APPOINTMENTS FOR THE WEEK.

16. Saturday (this day).
Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; Westminster, 1 p.m.; King's, 2 p.m.; Charing Cross, 1 p.m.
MEDICAL SOCIETY OF LONDON, 8 p.m.
ROYAL INSTITUTION, 3 p.m.: Professor E. Frankland, "On the Relation of Chemistry to Graphic and Plastic Art."

18. Monday.
Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.; Orthopædic Hospital, 3 p.m.

19. Tuesday.
Operations at Guy's, 1 p.m.
PATHOLOGICAL SOCIETY OF LONDON, 8 p.m.
STATISTICAL SOCIETY, 8 p.m.
PHARMACEUTICAL SOCIETY, 8½ p.m. Anniversary 12 noon.

20. Wednesday.
Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.
Orthopædic Hospital, 3 p.m.
ROYAL SOCIETY OF LITERATURE, 8½ p.m.
GEOLOGICAL SOCIETY OF LONDON, 8 p.m.

21. Thursday.
Operations at St. George's, 1 p.m.; Middlesex, 12½ p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.
MEDICAL SOCIETY OF LONDON—Lettsomian Lectures: Dr. Lankester, "On the Developmental History of Human Worms, and identity of Cystic and Cistoid Worms."

22. Friday.
Operations at the Moorfields Ophthalmic, 10 a.m.; Westminster Ophthalmic, 1½ p.m.
ROYAL INSTITUTION, 8½ p.m.

The Best Food for Children, Invalids,

and others.—ROBINSON'S PATENT BARLEY, for Making Superior Barley-Water in Fifteen Minutes, has not only obtained the Patronage of Her Majesty and the Royal Family, but has become of general use to every class of the community, and is acknowledged to stand unrivalled as an eminently pure, nutritious, and light food for Infants and Invalids; much approved for making a delicious Custard Pudding, and excellent for thickening Broths or Soups.

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Sold by all respectable Grocers, Druggists, and others, in Town and Country, in Packets, at 6d. and 1s., and in Family Canisters, at 3s., 5s., and 10s. each.

Sarsaparilla.—Fisher, Son, and

Haselden continue to prepare this valuable and highly-esteemed remedy in the following forms, which, combining purity with convenience, have received the approbation of members of every branch of the Profession:—

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Compound ditto ditto ditto
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An Ounce of either being equal to a pint of the Pharmacopœia decoction.

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Testimonials from Drs. Hassall, Letheby, and other eminent and scientific men, showing its great therapeutic powers, and marked superiority over all other kinds.

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To prevent imposition and adulteration, it is sold only in Bottles, secured by patent capsule, with "Duncan Hogarth and Co." stamped thereon, at 2s., 3s. 6d., and 6s. each; and in Dispensing Bottles—pints, 4s.; two pints, 7s. 6d.; and four pints, 14s.—See THE LANCET, Oct. 16th, 1856.

N.B. Beware of spurious imitations.

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6 and 8 oz., any shape, plain, or graduated ..	8	0 per gross.
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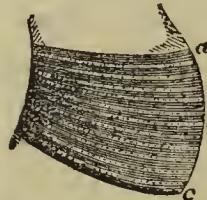
Recommended by the Faculty.—Pure

Manzanilla Sherry, 48s. per dozen. Amantillado, from 54s. Montilla, 72s. Olla Rosa, 66s. Jerez Viejo Aromatico, 84s. Bordeaux premier, 48s. Hungarian Magyar, red and white, 48s. JAMES MARKWELL, sen., since May, 1840, specially appointed Wine Merchant to Her Majesty and the Imperial Embassies. Offices, 35 to 40, Albemarle-street, and 4, Stafford-street, Piccadilly. N.B. Several dozen in Stock of the famous Old Wines accumulated by J. M. during his lengthened proprietorship of Ibbotson's, Long's, the London, and the Grafton Hotels. Good and pure Wines are not cheap. Stock, 5500 dozen.

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is constructed on a principle which secures the required support, without being liable to displacement, the fault which has hitherto characterised these appliances. When required, they are fitted with Air-pads for Umbilical, Inguinal, and Femoral Hernia; also with a longitudinal Air-pad for the support of the lower part of the Abdomen, and band with Air-pad for Prolapsus Uteri and Prolapsus Ani. These goods, in addition to Stockings, Thigh-pieces, Knee-caps, etc., supplied 25 per cent. lower than the prices hitherto charged, every article being of the very best quality.



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Single Circular Truss, 2s. 6d.; double ditto, 5s.; on Salmon's Expired Patent, 4s. 6d.; double ditto, 9s.; on Coles's Expired Patent, 5s.; double ditto, 10s.; Cotton Net Suspensory Trusses, from 10d.; Elastic Stocking Net bandage, 4d. per yard. Case of Tooth Instruments, £1; Case of Cramping Instruments, £2 13s. 6d.; Case of Pocket Instruments, £1; Brass Enema Syringe, complete in mahogany case, 10s. and 12s.; Case or Dissecting Instruments, Ivory Handles, 15s.; best Bleeding Lancets, per dozen, 18s.

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and very agreeable Food for Infants, Ladies who are Nursing, and Invalids suffering from any form of debility.

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ORIGINAL LECTURES.

LECTURES

ON

GENERAL NATURAL HISTORY.

By THOMAS H. HUXLEY, F.R.S.

Lecturer on General Natural History at the Government School of Mines and Fullerton Professor of Physiology, Royal Institution.

LECTURE XI.

THE term *Podophthalmia*, which is applied to that large and important primary group of *Crustacea*, whose type, the *Astacus*, has just been described at length, is in some respects unfortunate, inasmuch as some species, the totality of whose organization constrains us to include them among the *Podophthalmia*, have sessile eyes; while, on the other hand, it is universally admitted that certain stalk-eyed crustaceans, such as *Branchipus*, belong to an entirely different division. I insist the more upon the unessential nature of this character, because, I believe that there are yet a few more crustaceans with pedunculate eyes, consisting of the genus *Squilla*, with its immediate allies (the Stomapodes uncinatissés of Milne-Edwards), which must, in like manner, be detached from the ordinary *Podophthalmia*, if that term is to remain the denotation of a truly natural group.

Excluding for the present the *Squillidae*, the order of the *Podophthalmia*, as at present understood, is divisible on clear anatomical grounds into the following subdivisions:—1. The *Brachyura*; 2. The *Anomura*; 3. The *Macrura*; 4. The *Schizopoda*; 5. The *Diastylidae*.

The structural relations of the *Macrura* are nearly such as are indicated by their position in this series; and *Astacus*, as a central genus of a central group, thus becomes a sort of natural centre for the whole of the *Podophthalmia*, whence we may trace a gradual series of modification, leading on the one hand to the *Schizopoda* and *Diastylidae*, with their large abdomen and small cephalothorax; and on the other to the *Brachyura*, with their rudimentary abdomen and comparatively enormous cephalothorax.

In all the *Macrura* the branchiæ are numerous, and are covered by the branchiostegites. The abdomen is large, and is used as a locomotive organ, the appendages of its sixth somite being well developed. The thoracic ganglia usually form an elongated chain, and the external maxillipedes never form broad opercular plates over the other jaws. In some of the lower *Macrura* (*Peneus*, *Pasiphaea*), the exopodite persists as an appendage at the base of the thoracic limbs; and in two genera, *Sergestes* and *Aceles*, the posterior thoracic members become rudimentary or even entirely abortive, though the abdominal appendages remain.

In the higher *Macrura*, such as *Palinurus*, the nervous system exhibits a greater degree of concentration, the thoracic ganglia constituting an elongated oval mass; and it is in this genus and its allies that the head and its appendages exhibit modifications, which prepare us for those which are presented by the *Brachyura*. In this respect the *Palinurus vulgaris* (Rock Lobster, Sea Crayfish, or Spiny Lobster, as it is termed in the London market) is particularly worthy of the attention of the student. He will find that the rostrum is rudimentary and represented by a mere spine, leaving the anterior cephalic somites uncovered. The cephalic flexure is so strong as to throw the ophthalmic sternum, which is very wide, completely to the top of the head. The basal joints of the antennæ, or coxocerites, are enormous, fixed to the surrounding parts, and united by their anterior extremities in the middle line below. Superiorly, they seem to have coalesced with the antennular sternum, so as to form a projecting wedge-shaped mass, which separates the antennules from the ophthalmic sternum, and causes them to appear, at first, as if they were inferior to the antennæ. In this genus the basicerite, ischioerite, and merocerite are much thicker and stronger than the corresponding joints of any of the other appendages; and in the closely allied *Scyllarus*, whose facial region is, on the whole, similarly constructed, these joints become extremely expanded and flattened, and are succeeded by no procerite. In these genera the scaphocerite or squame, usually at-

tached to the base of the antenna, is absent; and in *Scyllarus* we find another approximation to Brachyuran structure in the existence of distinct orbits, formed by a lobe of the carapace, which descends on the inner side of the ocular peduncle, so as to meet the base of the antenna. No median septum is formed by the rostrum, however, nor are the antennules capable of being folded back into distinct chambers in any Macruran at present known.

The *Anomura* are so completely intermediate in structure between the *Macrura* and the *Brachyura*, that they need not be specially noticed, except to draw attention to the singular deviation from the ordinary habits and form of the higher Crustaceans, presented by the *Paguridae*, or Hermit Crabs, so common on all shores. Essentially Macruran in their organization, these *Crustacea* are distinguished from all true *Macrura* by the uncalcified and soft condition of their integument of their unsymmetrical abdomen, whose appendages are for the most part abortive,—those of the sixth somite being modified so as to serve as claspers. It is by means of these that the hermit crab retains firm hold of the columella of the empty gastropod shell into which it is his habit to thrust his unprotected abdomen, and covering over his retracted body with the enlarged chela, which takes the place of an operculum, resists all attempts at forcible extraction.

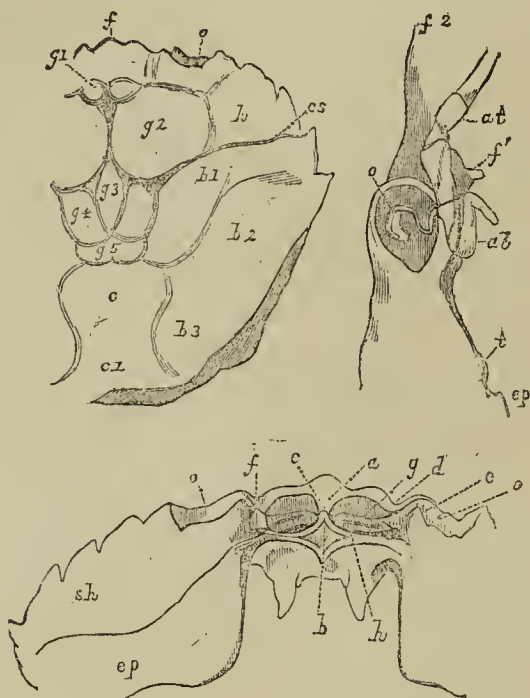
The internal structure of the *Brachyura* is, on the whole, similar to that of the *Macrura*; but the thoracic ganglia have coalesced much more than we saw to be the case in *Astacus*, forming a single rounded mass. The branchiæ are few, never exceeding nine on each side, and sometimes not more than seven. The branchiostegite fits closely down upon the base of the four posterior pairs of thoracic limbs, and sometimes incloses a space which is very large in proportion to the branchiæ. This is particularly the case in the land crabs, (*Gecarcinus*), where the spacious branchial chamber is lined by a thick and vascular membrane, which in these almost wholly terrestrial *Crustacea*, either takes on to some extent the respiratory function, or serves to keep the air within the branchial chamber saturated with moisture.

The abdomen in the *Brachyura* is comparatively small; its sixth somite possesses no appendages; and the others, if they exist at all, subserve only a sexual purpose, the two anterior pair commonly forming accessory copulatory organs in the male; while in the female so many of these appendages as remain give attachment to the ova, which are carried about until hatched, between the thorax and the abdomen, which is bent up against it. The female *Brachyura* also possess a spermatheca attached to each oviduct, which is absent in the *Macrura*, and in this sex the abdomen is larger and broader than in the male. In accordance with the rudimentary condition of this part of the body, the abdominal ganglia are represented only by a cord, which proceeds from the posterior part of the great thoracic mass. It is in the construction of their skeleton, however, that the *Brachyura* present the most interesting deviations from the *Macrura*. Thus, if we select the common shore-crab, *Carcinus Maenas* (Fig. 1), as a typical example of a Brachyuran, we find that the carapace is a wide shield, broader than long, having a somewhat pentagonal shape, and bent sharply inwards at the side, instead of taking an even sweep down to the base of the legs. With the four posterior pairs of thoracic limbs, it is in such close contact as to leave no passage or aperture such as exists in *Astacus*, the only inlet for the water required for respiration being placed above the basal joints of the chelate anterior ambulatory limbs. The edges of the carapace pass completely in front of the base of the limbs, and then turn suddenly forwards, parallel with one another and with the axis of the body, as the "pterygostomial" plates of Milne-Edwards, to join the antennary sternum, which is very wide, but narrow from before backwards. The space included between the edges of the pterygostomial plates and the antennary sternum is the "cadre buccal," or *peristome*; the antennary sternum itself receives, as in the *Astacus*, the specific appellation of *epistoma*, and the plate which stretches backwards and supports the labrum within its posterior forked boundary is the *endostoma*.

The middle of the dorsal surface of the carapace is marked somewhat nearer its posterior than its anterior boundary by a short transverse depression, which is continued on each side forwards and outwards, and then curves directly outwards to the edge of the carapace. Further than this I cannot trace this homologue of the cervical suture of *Astacus*. Elevations and depressions upon the surface of the carapace in front of

the cervical suture, which I believe to be here, as in *Astacus*, composed of the connate terga of the six cephalic somites, mark it out into certain definite regions of considerable systematic importance. An irregular transverse depression crossing the carapace near the anterior margin bounds an anterior or facial region, divided into a middle "frontal" lobe (*f*), and lateral "orbital" lobes (*o*), from a posterior, much

FIG. 1.



Of the two upper figures the left represents the dorsal surface of the carapace of *Carcinus maenas*. *f*. Rostrum. *o*. Orbit. *c*. Cervical suture. *g*¹. Epigastric lobe. *g*². Protogastric. *g*³. Mesogastric. *g*⁴. Hypogastric. *g*⁵. Urogastric. *c*. *c*¹. Anterior and posterior cardiac. *h*. hepatic. *h*¹ *h*² *h*³. Epibranchial, mesobranchial, and metabranchial lobes. The lower figure represents a ventral view of the same. *a*. Rostral septum. *b*. Antennary sternum. *c*. Suture between these. *d*. Supraciliary lobe. *e*. Internal suborbital lobe. *f*. Antenna. *g*. Articular cavity for ophthalmic peduncle. *h*. The same for antennule. *o*. Orbit. *sh*. Subhepatic region. *ep*. Anterior pleural region. The right hand upper figure gives a side view of the carapace of *Stenorhynchus phalangium*, the common "spider-crab." *o*. Orbit. *f*. Rostrum. *al*. Antennule. *at*. Antenna. *ep*. Epistoma.

larger, gastro-hepatic area, divided into small lateral "hepatic" lobes (*h*), and a large complex "gastric" lobe (*g*¹, *g*², etc.). The latter is again subdivided into two "epigastric" lobes (*g*¹), two "protogastric" lobes (*g*²), a median "mesogastric" lobe (*g*³), two "metagastric" lobes (*g*⁴), and two "urogastric" lobes (*g*⁵), making altogether nine subordinate divisions. The gastric lobes correspond in a general way to the stomach; the hepatic lobes to a portion of the liver. The region behind the cervical suture consists, as I believe, of the connate terga of the eight thoracic somites; it is divided by two strong longitudinal grooves, the "branchio-cardiac" sutures, into a middle region, corresponding with the heart, and two lateral regions, forming the roof of the branchial chamber. A transverse inflected depression divides the middle region into an anterior and a posterior cardiac lobe, while the "branchial region" is subdivided into "epibranchial" (*b*¹), "mesobranchial" (*b*²), and "metabranchial" (*b*³) lobes.

On turning to the inflected inferior portion of the carapace, a sutural line is seen running from the epistoma, outwards and backwards, very nearly reaching the outer edge of the carapace, opposite its external angle, and then sweeping backwards parallel with, and but little distant from, its posterolateral boundary, until it cuts its posterior edge. The portion of the carapace internal to this sutural line, is called by Milne-Edwards the "inferior branchiostegite," and is considered to be composed of an anterior (*ep*) and posterior "epimeral" piece, corresponding with the "sub-hepatic" (*sh*) and "sub-branchial" regions of the surface of the carapace between the suture and the line of inflection.

I cannot regard these parts, however, as having any relation with the true epimera. The suture seems to me rather to correspond with that which marks off the pleuron from the rest of the somite in *Astacus*; and I would propose, therefore, to substitute the terms anterior and posterior "pleural," for "epimeral" lobes.

The anterior cephalic somites in *Carcinus* have undergone some singular modifications, whereby their true relations are greatly obscured. The broad trilobed plate (*f*) corresponds with the elongated rostrum of *Astacus*; inferiorly it is produced in the median line into a strong ridge or septum, whose lower and posterior edge is convex, and fits closely into the concavity formed by the antennular and ophthalmic sterna, as they bend back from the sternal flexure. This rostral septum, therefore, abuts below and behind on the epistoma, and constitutes a sort of partition, by which the cavities in which the antennules and eyes of the two sides are lodged, are completely separated from one another. The lateral portions of the rostrum constitute a flattened roof over the inner portions of these cavities, which contain the bases of the ophthalmic peduncles and the antennules; but the outer angles of the rostrum are produced downwards (*d*), to form the "supraciliary lobe." The outer half of the lateral cavities or chambers is more excavated, and is bounded by a strong pointed process, the "external orbital" lobe, which is divisible into a "supra" and "sub-orbital" portion; the latter passes gradually into a strong process of the sub-hepatic region, called the "internal sub-orbital" lobe, which turns forwards and upwards towards the supraciliary lobe, which it approaches, but does not meet, the basipodite of the antenna being, as it were, wedged between the two.

The supraciliary, external orbital, and internal sub-orbital lobes, and the antennæ, thus together circumscribe a cavity widely open in front and externally, which is called the orbit, inasmuch as it lodges the terminal portion of the ophthalmic peduncles, with the eyes which they support. The proximal portions of the peduncles pass through the comparatively narrow opening of communication left between the inner and outer chambers, between the antenna and the supraciliary process, and are inserted as usual into the articular cavities on each side of the ophthalmic sternum, which is narrow, and hardly wider than the septum. It thus comes to pass that the eyes, lodged in their orbits, appear to be altogether external to the antennules, whose enlarged bases hide the ophthalmic peduncles, and appear to be the sole contents of the inner division of the sub-frontal chamber; but their true position is precisely the same as in *Astacus*, that is to say, anterior and superior to the antennules. Another interesting peculiarity about the facial region of the carapace is that the basal joints of the antennæ have coalesced with the sternum of the antennary somite, and that the base of the antenna is consequently immovable. There is no vestige of a scaphocerite, and the aperture of the peculiar organ which opens on the coxocerite *Astacus*, is provided with a peculiar moveable plate, provided with a projecting internal stem, to which delicate muscles are attached internally. It is this structure which has been compared to an auditory ossicle, but, as we have already seen, the auditory sacs are, in fact, lodged in the dilated basal joint of the antennule.

A cervical fold, lodging the enlarged exo-epipodite of the sixth cephalic appendage, occupies the same relative position as in *Astacus*, and marks off the cephalic from the thoracic region on the sides of the body. The thoracic sterna gradually increase in breadth, and the posterior ones are marked by a strong median, longitudinal depression externally, answering to a corresponding fold on the inner surface. The apodemal cells are well formed, but the sternal canal, so largely developed in the *Macrura*, is absent in this, as in all other *Brachyura*.

The structure of the appendages is essentially the same as in *Astacus*, but the third thoracic appendage, or external maxilliped, has its meropodite greatly enlarged, so as to form a broad plate, which, with its fellow, covers over the other organs, and hence receives the name of the gnathostegite. The three terminal joints of the limb remain small, and constitute a palpiform appendage—the "endognathary" palp.

In some of the lower *Macrura* the thoracic limbs are provided with a short exopodite, and the posterior maxillipedes become indistinguishable from the ordinary thoracic limbs; and such forms lead us naturally to the *Schizopoda*, a group whose name is derived from the appearance of cleft limbs produced by the great development of the exopodite, which is in these *Crustacea* as large as the endopodite. In this division, again, a line can hardly be drawn, in many cases, between any of the maxillipedes and the thoracic limbs, the anterior pair only being somewhat smaller than the rest. Hence *Thysanopoda* is admitted, even by Milne-Edwards, to have

eight pair of thoracic limbs (Crustacés, ii. 464). The branchiæ in the *Schizopoda* are frequently absent; when well developed, as in *Thysanopoda*, they are not included under the branchiostegite, but hang down freely from the bases of the thoracic limbs. In *Mysis*, the only representative of a branchia (if it be one in reality) is a process attached to the first thoracic appendage. *Cynthia* is said to have branchial appendages attached to the abdominal members. *Leucifer*, *Phyllosoma*, and *Amphion*—three genera which I remove from the *Stomapoda*, as defined below, and place with the *Schizopoda*,—are entirely devoid of true branchiæ.

In the three first-named genera, *Thysanopoda*, *Mysis*, and *Cynthia*, the general structure of the body is similar to that of the *Macrura*, except that in *Mysis* the greater number of the abdominal appendages are rudimentary, but in the last three, some very singular modifications take place in the form and proportions of the cephalic, thoracic, and abdominal somites.

In *Leucifer*, the antennary somite is produced into a very long and narrow peduncle, which supports the eyes on their great stalks, the antennules, and the antennæ, at its extremity, separating them from the rest of the cephalo-thorax, which is covered by a delicate carapace, bent down at the sides. The anterior thoracic members are rudimentary, and the posterior pair are absent. The heart is short and rounded, and situated, as usual, in the thorax.

The "Glass crabs," or *Phyllosomæ*, are still more singular, presenting two large extremely flat and transparent disks, devoid of any segmentation. The anterior of these bears the pedunculated eyes, the antennules and the antennæ on its anterior margin, while the labrum, with the mandibles and anterior pair of maxillæ, form a small projection posteriorly on its ventral surface. The second pair of maxillæ is situated a little more backwards and outwards, and bears a scaphognath; and just behind these appendages is the fold or cervical groove which separates the anterior disk from the posterior. The anterior disk contains the stomach and the liver, and in this respect, as in its appendages, corresponds exactly with the cephalic arc of the carapace of an ordinary Crustacean, and its six cephalic sterna. The posterior disk, on the other hand, contains the short and almost round heart, with the intestine, and bears the eight pairs of thoracic appendages, the anterior and posterior of which are not uncommonly rudimentary.

The abdomen is usually very small, and situated in a notch at the posterior edge of the thoracic disk. It is provided with six pair of thoracic appendages.

The *Diastylidæ*, typified by the genus *Cuma*, are very remarkable Crustacea, allied by their whole structure to the *Schizopoda* on the one hand, while on the other, they appear in many respects to represent persistent larvæ of the higher Crustacea—superadding, however, remarkable peculiarities of their own in their sessile eyes or eye, and the peculiar construction of their cephalothorax.

Cuma Rathkii (a) is a singular Crustacean, which might at first be readily mistaken for a Copepod, possessing a comparatively small thick carapace, apparently produced into a rostrum anteriorly, and succeeded by a series of twelve gradually narrowing segments, whose appendages are in great part obsolete. The last of these segments is a pointed telson; the anterior five, belonging to the thorax, bear thoracic limbs, while the eleventh, the last true somite of the body, carries its characteristic styliiform appendages. The appendages of the preceding abdominal somites are either absent or very small and rudimentary.

On examining the apparent rostrum with care, it is found to be divided along the middle line by a fissure which runs in front of the eye, which is here single and sessile, divides into two branches, which run backwards and outwards, and terminate, before traversing half the length of the carapace; they thus cut off a median lobe, bearing the eye at its apex, from two lateral processes. The lateral processes are simply prolongations of the antero-lateral regions of the posterior division of the carapace (as it were the antero-lateral angles of the carapace of *Mysis*, excessively produced and meeting in the middle line), while the middle lobe corresponds, I believe, with the cephalic arc of the carapace in ordinary *Podophthalmia*, the insertions of the mandibular muscles occupying their

normal position, towards its posterior boundary. The hinder part of the carapace will therefore correspond with the terga of the three anterior thoracic somites, the five posterior ones being, as has been seen, free and moveable.

The five anterior pair of thoracic appendages are constructed much on the same plan as those of the *Schizopoda*; the three posterior have no exopodite. In the female the sixth abdominal somite alone has appendages, but in the male the two anterior abdominal somites are provided with styles. Ovigerous plates are attached to the fourth, fifth, and sixth thoracic appendages in the female. The structure of the head is peculiar. No ophthalmic sternum nor ophthalmic peduncles are discernible, the eye being sessile on the median line on the superior surface of the head. The coxopodites and basipodites of the antennules and antennæ are bent down almost at right angles with the axis of the body, and appear to be connate or confluent with their sterna. The succeeding joints are free and pass forwards, the antennules being much longer and stronger than the antennæ; the labrum is large; the mandibles strong and unprovided with a palp. There is a distinct metastoma, and the maxillæ are delicate and foliaceous. A papillose branchial plate is attached to the base of the first thoracic appendage.

The surface of many parts of the body exhibits a very peculiar sculpturing, singularly like that exhibited by the extinct *Pterygotus*.

With the *Diastylidæ*, I think, we must conclude the series of the ordinary *Podophthalmia*. Of the *Stomapoda* of Milne-Edwards, two of the three divisions, the *Caridoïdes* and the *Bicuirassés* have found a place among the Schizopodous *Podophthalmia*; but the third, the *Stomapodes unicurassés*, comprising *Squilla*, *Gonodactylus*, *Coronis*, *Squilleriethys*, *Ericthys* and *Alima*, appear to me to differ so widely and in such important structural peculiarities, not only from the *Podophthalmia* hitherto described, but from all other Crustacea, as to require arrangement in a separate group, for which the title of *Stomapoda* may well be retained.

The genera named, in fact, stand alone among the Crustacea, (unless the genus *Pontia*, among the *Copepoda*, present something of the same kind,) in that the ophthalmic and antennular somites are complete rings, moveable upon one another and the antennary somite, and that their axis is parallel with that of the body, so that there is no complete sternal flexure. The heart again is not rounded, with at most three pairs of apertures and confined to the thoracic region, as in the true *Podophthalmia*; but it is greatly elongated, multilocular, and extends into the abdomen. The branchiæ, when well developed, are plumes attached to the abdominal members, and, so far as I have been able to ascertain, the carapace is in all cases connected exclusively with the cephalic somites. This is particularly well seen to be the case in *Squilla scabricauda*, where five completely developed posterior thoracic terga can be counted, uncovered by the short carapace, beneath which the terga of the three anterior thoracic somites are represented by a membrane which passes forwards to be reflected into the carapace.

The free somites of the thorax, and those of the abdomen, in this species and in the *Squillidæ* generally, are so large in proportion to the carapace, that the latter is not larger in proportion to the body than the tergal covering of the head in many *Edriophthalmia*, with which order the *Stomapoda* present many marked affinities. Indeed, if we leave the eyes out of consideration, the organization of the *Stomapoda* is more *Edriophthalmian* than *Podophthalmian*, and I am much inclined to regard them as a distinct group, occupying a central place among the Crustacea generally, and more especially between the *Podophthalmia* and *Edriophthalmia*.

I have now stated the leading facts in regard to the organization of those Crustacea which are commonly included under the order *Podophthalmia*, and it remains only to group these facts together into a theory of the common plan of the *Podophthalmia*.

In all these animals we have seen that the body is normally composed of twenty-one segments, but of these the last never bears true appendages, and is developed subsequently to the others from the dorsal surface of the body. Hence we are justified in regarding it not as a somite or primitive typical segment of the body, but as a peculiar median appendix, to which the special name of "telson" may be applied. Thus the number of somites becomes reduced to twenty, each bearing its pair of appendages. Of these twenty somites the six

(a) I am indebted to the kindness of Mr. Spence Bate, the author of an excellent memoir "On the British *Diastylidæ*," and of other valuable contributions to Crustaceology, for the opportunity of examining several specimens of this animal.

posterior are by general consent termed abdominal, and the only question for discussion is with regard to the extent of the other two divisions of the body; of the anterior fourteen somites how many are cephalic and how many thoracic? M. Milne-Edwards originally put forward the view, which has been followed by all subsequent writers, that there are seven thoracic and seven cephalic somites. But we find throughout the series of the *Podophthalmia* that cervical fold to which allusion has been so often made, distinctly separating the six anterior from the eight posterior somites. Furthermore, if we turn to the appendages, we find those of the seventh somite to present a marked difference from those of the sixth, and an equally marked similarity to those of the eighth, ninth, and succeeding thoracic somites. This difference was and is admitted by Milne-Edwards and all his successors, in their application of the term "maxillipedes" to the seventh pair of appendages and its two successors, while the term maxillæ was reserved for the fifth and sixth pair of appendages. The maxillæ vary but little throughout the *Crustacea* which have hitherto been under discussion, and never assume any but masticatory and respiratory functions. The maxillipedes, on the other hand, gradually pass, as we descend the series, from the specially modified jaws of the *Brachyura*, to the locomotive feet essentially indistinguishable from those of the rest of the thorax, into which we find them all converted in *Thysanopoda* and *Squilla*.

It appears to me, then, that as regards the ordinary *Podophthalmia*, we have in the cervical fold of the body, and in the sudden change in the character of the appendages between the sixth and seventh somites, clear evidence of the position of the natural boundary between the head and the thorax; and if further proof were wanted, I think it is furnished by *Squilla scabricauda*, in which the contrast between the six cephalic somites and the eight thoracic ones is of the most marked and distinct kind.

Admitting that there are six cephalic and eight thoracic somites, the next question is; what share do these respectively take in the composition of the carapace? The idea of Milne-Edwards, admitted, under more or less modified forms, by all subsequent Carcinologists is, that the carapace is entirely a development from the terga of the third and fourth (antennary and mandibular) somites, the cervical suture indicating the boundary between the antennary and the mandibular terga. I confess I cannot reconcile this view with the facts furnished by either anatomy or development. In all the *Brachyura*, *Anomura*, and ordinary *Macrura* it appears to me to be obvious that the carapace is continuous with, and a part of, all the somites of the cephalo-thorax; that it is composed in fact of their connate terga, the branchiostegite being nothing more than their connate and highly developed pleura; the cervical suture, placed immediately behind the attachment of the mandibular muscles and in front of the heart, corresponds in these respects precisely with the posterior boundary of the head of a *Squilla*, of a Branchiopod, or of an Edriophthalmian; the cephalic arc roofs over the stomach, as does the tergal region of the head in these last-named *Crustacea*. Anatomically, then, it seems to be demonstrable that the scapular arc of the carapace in the ordinary *Podophthalmia* is the equivalent of the terga of the thorax; that the cephalic arc is the homologue of the terga of the head, and that the carapace is formed by all the cephalo-thoracic somites.

ORIGINAL COMMUNICATIONS.

CASE OF SUBCLAVIAN ANEURISM

CURED BY DISPLACING A PORTION OF ITS FIBRINOUS CONTENTS.

By ROBERT LITTLE, Esq.

AMONG the numerous improvements in modern surgery, probably there is not one that deserves a higher position than the treatment of aneurism by compression; and proud am I to say that the adoption or rather the revival of this practice is incontrovertibly due to the Surgeons of Dublin; for although successful cases have been occasionally recorded since the beginning of the 17th century as having resulted from compression applied in various ways, still they must be regarded rather as accidental circumstances, at least since the introduc-

tion of the Hunterian operation in 1785, compression having been resorted to since that great improvement in surgery only in those cases where the application of the ligature was deemed unadvisable, either from a diseased condition of the artery, a shattered state of the constitution, or probably from a dread of the difficulties and dangers attending that operation, which neither skill nor caution could avert; for strange as it may appear, notwithstanding its vaunted success, there were few operations which the experienced Surgeon approached with more anxiety or apprehension.

In the year 1842, Mr. Hutton, of the Richmond Hospital, successfully treated a case of popliteal aneurism by compressing the femoral artery. His case was rapidly followed by others under the care of Mr. Cusack, Drs. Bellingham and Harrison, and since that time the amount of success has been so great, so many cases have followed each other in uninterrupted succession, that now this safe and simple mode of treatment has almost completely superseded the operation of John Hunter in all cases admitting its adoption. At first, a great many objections were naturally raised against it, as being both more painful and more tedious than the ligature; however, the first objection has been in a great measure removed since Dr. Bellingham so fully explained the principle on which the cure of aneurism by compression is effected, having shown that it is unnecessary to exercise such an amount of pressure as would completely interrupt the circulation through the artery, which was the opinion previously entertained, but that it is sufficient merely to diminish the current, whereby a gradual deposition of fibrin occurs in the sac; and as regards the treatment by compression being more tedious, I can from experience say that at least it is not always so, for in a case of aneurism at the bend of the elbow resulting from venesection, which was treated by me about four months since, pressure on the brachial artery about the middle of the arm was kept up only for 48 hours, when all pulsation in the tumour ceased, and the patient left the Infirmary after a few weeks perfectly well; moreover, he did not complain much of pain during the compression.

Unfortunately, however, cases of aneurism of the subclavian and innominate not unfrequently present themselves, in which compression is not practicable, and from the want of success that has invariably attended the operation of tying either of these arteries under such circumstances, it is now very properly regarded as neither advisable nor justifiable; and whether we have recourse to palliative measures on the Valsalva principle, or adopt the distal operation as recommended by Brasdor and Wardrop, the result is alike unpromising, scarcely a gleam of hope presenting itself; and the disease almost invariably progresses to a fatal issue. Happily, however, a mode of treatment has been devised by the genius of that distinguished surgeon, Mr. Fergusson, of London, which holds out brighter prospects in such cases. He has proposed that a portion of the fibrinous contents of the sac should be displaced, and directed towards the axillary and brachial, so as to obstruct the distal end of the artery, and thereby arrest the current through the aneurism; and a case so treated by him has been alluded to in the *Lancet* for September, 1855. A similar one having occurred in my practice, I shall offer no apology for bringing it before the notice of the profession, conceiving it to be a case of great practical interest and importance, and that it is the duty of all, so far as in their power, to contribute their mite towards the elucidation or establishment of a novel mode of treatment, especially when applicable to a class of cases hitherto almost regarded as beyond the pale of surgery.

Daniel McMonagle, an albino, aged 53, admitted into the County Donegal Infirmary on the 6th October, 1855, with an aneurism of the right subclavian artery, gives the following history of his case:—States that, having been in the habit of dealing in eggs and fish, which he usually carried through the country in a basket suspended on his back by means of straw ropes through which he passed his arms, he first felt pain in the right arm in the preceding month of March, which gradually became so severe that in the month of May he was frequently obliged to sit down on the road-side and remove his burden for a time. Soon afterwards he discovered a tumour above the right clavicle, directly corresponding to the site on which one of the ropes pressed, which also became painful after a short time; and in the beginning of July he perceived "a beating in the lump," which then began to enlarge rapidly. In the month of August he says he had such a feeling of drowsiness that for a fortnight he slept the greater

part of each day and night, during which time he lost his appetite and took nothing but milk, and at this time he was unable to bend his fingers. Sleep then suddenly deserted him, and he declares that for a fortnight prior to his admission into the Infirmary he did not sleep for a single hour, owing to the intensity of the pain in the tumour and along the arm.

Symptoms on Admission.—A tumour equal in size to the largest goose egg occupies nearly the entire of the supraclavicular region, extending from the clavicular attachment of the sterno-cleidomastoid to the acromial end of clavicle, which has a strong pulsatory movement that is visible from the most remote part of the ward, and is accompanied with a loud bruit de soufflet; it is soft and compressible, and is red and somewhat inflamed on the surface, from which circumstance Doctor Greer, under whose notice the patient first came, greatly feared the aneurism would have burst. There is no appreciable dulness on percussion under right clavicle, but the respiratory murmur is not as distinct as on the opposite side; however, this may arise from its being somewhat masked by the loud bruit on that side; the superficial veins of head and neck are considerably enlarged, but he does not suffer either from cough, dyspnoea or dysphagia; tongue tolerably clean, pulse at wrist 80, and regular; appetite not good. His chief source of complaint is a severe and constant pain extending from the tumour down the right arm as far as the tips of the fingers, which he says is most acute about the middle of the humerus, and he is constantly compressing this part with the other hand, conceiving that it gives him some relief. At first he got sedatives, had cold applied to the aneurism, and each night had a full anodyne, which treatment somewhat moderated the violence of the pulsation, and made him feel more comfortable, and after a few nights when the anodyne had been considerably increased he got some tranquil rest.

In December he was bled twice from the arm, and ice was kept constantly applied over the tumour for three weeks, without any manifest improvement, except that the redness and inflammatory appearance of the integument covering the aneurism have completely disappeared; in other respects, the symptoms remain unaltered. Having seen the report of Mr. Fergusson's very interesting case, I resolved to follow his suggestion in this apparently hopeless one, and I must confess I did so without any very sanguine expectation of success. Accordingly, on the 1st of January, 1856, by making gentle but steady pressure with my thumbs alternately over the aneurismal sac, I succeeded in displacing some of the coagula, and directing them towards the distal end of the artery. No other local treatment was adopted, but he was ordered the persesquintrate of iron internally. For the first two days no change was perceptible in either the tumour or the arm; but on the third day the pulse at the wrist was manifestly weaker, and the arm somewhat colder than the opposite one. These symptoms gradually increased up to the tenth day after the manipulation of the sac, when no pulsation could be felt in either radial, brachial, or axillary arteries. The tumour itself had now become more solid, and the bruit and pulsation were both diminished; the violent pain in the tumour and along the arm has also decreased, but now he complains of a sensation of coldness over the right shoulder and scapula, and of a severe pain extending along the side of the neck and back of the head, which increased in severity for a month, and the arm became greatly wasted, and partially paralyzed, retaining very little sensation and scarcely any power of motion.

March.—All pulsation in the aneurism having now ceased to be visible, pressure was applied over it.

November.—Both bruit and pulsation have completely disappeared; the aneurism is not more than one-third its original size, and is quite solid; the anterior edge of clavicle feels thin and sharp, from the absorption of its upper surface, caused by the pressure of the sac, and the pain along side of head and neck, heretofore so much complained of, has completely subsided. The arm has regained its natural temperature, and, although still considerably attenuated, he can use it tolerably well, sensation having also returned to it. A very slight pulsatory wave can now be felt in the radial artery, but not in either brachial or axillary. Two superficial arterial branches, of considerable magnitude, can also be traced, running in a transverse direction across the remains of the aneurism, one immediately above the clavicle, the other somewhat higher up.

March, 1857.—Having again admitted the patient into the Infirmary within the last few days, for the purpose of examining his condition, the absorption of the tumour is steadily

progressing, being now not larger than a walnut. Pulse at the wrist somewhat stronger than at last report, but still not to be felt in either brachial or axillary. Sensation and motion are completely restored to the arm. He is free from all pain, and says he feels perfectly well, and intends resuming his former occupation. I may mention, that most of my Medical brethren in this locality having taken a deep interest in this case, and visited him from time to time while under treatment, have also seen him since his last visit to the Infirmary, and agree with me in considering the cure to be most satisfactory and complete.

It may be objected to this mode of treatment that it is of too dangerous a nature to admit of general application; still it is scarcely possible to conceive a more unpromising case than this was, the aneurism being of considerable size, soft and compressible, and so much inflamed on the surface that the Medical gentleman who sent the patient to me was apprehensive of its bursting: still here we have had a satisfactory and unexpected result; and should subsequent observation and experience prove that this is not an isolated and exceptional case, it not only points out to us a mode of treatment applicable to these cases of aneurism where the ligature and compression are alike unavailing, but also seems to suggest the possibility of curing some cases of internal aneurism under favourable circumstances; and a hope may justly be entertained that the day is not far distant when curative measures may confidently be had recourse to in a class of cases hitherto regarded as hopeless and irremediable.

Lifford, County Donegal.

ON THE IMPORTANCE OF THE PULSE IN RELATION TO CHLOROFORM.

By ROBERT DYCE, M.D.

Senior Physician to the Royal Infirmary, and Lecturer on Midwifery, Marischal College and University, Aberdeen.

THERE have been so frequently cases recorded in different Medical journals of death from chloroform, more especially in England, that perhaps any attempts to inquire into the cause may not be thought undeserving a place in this journal. At the risk even of writing upon a subject *usque ad nauseam*, when opinions differ, and especially where life is at stake, every one who possesses experience is bound to give the professional public the benefit of that experience. I consider that I am in that condition, first, from the numerous and constantly recurring opportunities I have had since the first introduction of chloroform into practice since 1847, not only in ordinary midwifery but in all obstetric operations, (in all of which I consider its exhibition indispensable,) but, secondly and principally, from having been employed by most of my colleagues in the Infirmary, and several of my Professional brethren in Aberdeen for many years, both in their hospital and private practice, in administering chloroform previous to the performance of surgical operations; it will, I presume, be considered that my experience at least has been ample, and that the views I entertain have not been arrived at upon light or insufficient grounds. I may further mention, that every patient previous to a surgical operation, unless those connected with the mouth and those of a trivial nature, is submitted to its influence, and that upon an average there have been about two and one-third operations weekly during the last seven years. But whether this may be considered satisfactory or not, or however much some men may differ, or even totally abnegate the views I advocate, I have yet this great satisfaction in knowing,—and which is worth every other argument put together,—that while the precautions I insist upon have been pursued, in no single instance has its inhalation been attended with alarming results, far less with fatal consequences.

I read constantly, that in giving chloroform you must put only a certain quantity upon the handkerchief, or whatever else is employed; that it is only safe to give it with this and that peculiar apparatus; that you are to watch the breathing, says one, the flickering of the eye and state of the tongue, says another; while a third raises the arm and lets it drop, as the only indication that a sufficient and safe amount of anaesthesia is produced. Now, I neither do the one nor the other of these things. I care not how much chloroform is poured upon the medium for its exhibition. I use no peculiar apparatus. I am indifferent as to the breathing, the eyes, the tongue, or

any of these things. To one thing only do I attend, and that is the pulse—the state of the circulation; but from the moment my patient begins to inhale, from that moment I keep my finger steadily upon the pulse, and by its rapidity, its regularity, and sometimes its volume, is the future quantity regulated. I know well that there are men of eminence in the Profession who ridicule and sneer at such a procedure, but I defy them to point out a case of death where the pulse has been made the guide. Indeed, so satisfied am I from very extensive experience, that this is the only sure and unerring criterion of the extent of its influence upon the system, that I fearlessly give it to every class of patient, and at every period of life, from the earliest infancy to extreme old age. Your readers must, however, understand, that it is not by merely now and then, at uncertain intervals, taking hold of the arm and feeling the pulse, that reliance on it is to be placed—the finger must never be off it when inhalation is going on, and by this means, even blindfolded, the very earliest indication of danger is communicated.

There is a fatal case recorded as occurring in the Middlesex Hospital in July, 1854, where it is stated, "The pulse, which had risen to 120, descended to 70, having a full, steady, and deliberate beat;" again, "that at the end of ten minutes violent spasms were induced. These continued about three minutes, and then somewhat subsided." It then goes on to say that the pulse gave a few rapid and irregular beats, and then ceased, the face becoming pale and death-like; the inhaler was then removed instantaneously." On reading this case at the time of its publication, and on again perusing it, the same impression remains upon my mind, that to two circumstances may be attributed the unfortunate result:—1. As it is not specially stated to be otherwise, it is to be presumed that the inhalation was continued during the time of the "violent spasms," so as to get the patient as quickly over this state as possible—a plan which many recommend, and one, although I had misgivings, I once pursued myself. This I now consider extremely hazardous, because very seldom can the pulse be felt during this muscular rigidity, and because it is quite possible that the muscular walls of the heart may partake of the same state as the rest of the body. Be this as it may, if spasm or rigidity of the muscles prevents the pulse being distinctly felt, the inhalation must be instantly stopped until the spasms subside.

2. The pulse in this case is stated to have descended from "120 to 70." On reading this, one is led to conclude that a sudden dropping of the pulse to the lowest figure had taken place. Now this, in my experience, rarely happens; the time for the change is always appreciable and sufficiently well marked, if the pulse is steadily watched. There are, no doubt, differences in this respect in some cases, though rarely, as there are in the facility with which one patient inhales it over another; and this very circumstance is a strong argument in favour of a continuous watching of the pulse. I have known none more full inhalation at this stage, when the pulse has begun to fall, sink it suddenly so low, that had another been allowed the heart would have ceased to beat. Generally, however, the pulse does not sink suddenly, but gradually—hence it always gives warning; but no change, whether rapid or slow, must be disregarded. My plan is, therefore, never to persevere when rigidity comes on, and to stop, in like manner, when the pulse begins to fall, or else to give it very cautiously, and this cannot be done unless the finger is constantly upon the pulse. So much for the velocity of the pulse—the chief point of attention. There are, however, two other qualities of the pulse which deserve attention—one is a state absolutely debarring its continuance; the other state is comparatively of little value.

The first of these states, that of danger, is where the pulse becomes irregular or intermitting. This is not a common occurrence, nor does it seem to be dependent upon manifest disease of the heart, as far as I have observed; yet I have always desisted, whenever this state of the pulse has come on, fearing some untoward result. One case I well recollect was upon the operating table, and was being put under chloroform: on three several times, just as unconsciousness was manifesting itself, the pulse became at once intermitting, and fell down perceptibly in quickness, without the slightest change in the breathing or rigidity of the muscles. In a few seconds the irregularity had ceased, and the inhalation, which had been stopped, was resumed. Again the pulse intermitted. A third time the same effect was produced on resuming the

inhalation. In another case, that of a very stout female, a monthly nurse, who was about to have a fatty tumour removed from the shoulder. This irregularity in the pulse, twice in succession, showed itself on approaching unconsciousness, and latterly with excessive congestion of the face, but without spasm. I declined to continue it, and the patients were operated upon without it. This peculiarity in my experience is very rare; for I cannot recollect, out of many hundred cases, above five or six where it came on. Three of the subjects were very fat persons. May not the same state of the heart have led to this peculiarity?

The other state of the pulse is its volume. This I consider of little or no value as a guide, although, in every case, this is one of the first, if not the very first indication of commencing anaesthesia, the pulse becoming full and almost bounding. If the patient is in previous health it is also quickened; as the effects become more manifest, the fulness subsides to its ordinary state, and remains, with very little alteration as to strength, throughout the period of unconsciousness. Continue the inhalation, and its velocity or rapidity is altered; but, unless the pulse falls very much in quickness, its volume is seldom much affected. No reliance is, therefore, to be placed on this state; it gives no warning of the nearness of danger, for I have seen it full, at least not weak, when its velocity was but 60. The only occasion where volume, or in other words, its strength or weakness is of moment is, when a patient loses, or is likely to lose, much blood during a surgical operation; then double caution is necessary in administering chloroform. Haemorrhage weakens the strength, but increases the velocity of the pulse. Chloroform alone lessens the velocity; but, unless in excess, seldom alters the strength or volume of the pulse. Faintness, or complete syncope, may be only the effect of the haemorrhage; but, when faintness is present, even with imperfect unconsciousness from chloroform, it is always alarming, as the means at our command for rousing and stimulating the patient are limited to external means. Hence, I repeat, great watchfulness is requisite in continuing chloroform when haemorrhage is going on; and here the pulse is the sole and unerring guide.

With regard to the mode of administration I have nothing new to announce; there are, however, a few points which I always attend to, and which I may be excused mentioning, as I believe them to be of importance.

1. I use a clean white, thin, or cambric pocket-handkerchief, folded from the corners inwards, as recommended by Professor Simpson, as being most easily managed.

2. I never measure the quantity poured upon the handkerchief, but thoroughly wet the centre, (which is made slightly hollow,) perhaps to a space the size of the palm of the hand. This must be renewed every few seconds, as it rapidly evaporates.

3. I never force the breathing of it pure at first, and always avoid coughing; hence the handkerchief is so held that a portion of atmospheric air is mixed with the chloroform; gradually it is brought nearer, so that at last the mouth and nose are covered, and it is then inhaled pure.

4. In all cases I produce complete unconsciousness at first, whether this state is to be kept up to the same extent or not; by this means a single inhalation afterwards, on any movement appearing, readily affects the patient. With half measures at first this is not so easily accomplished.

5. The person giving chloroform should have nothing else to attend to; his attention ought to be entirely confined to its administration and effects. I recollect some years ago assisting an eminent professor of surgery at an operation, where inattention to this rule proved nearly fatal to our patient. But if, as sometimes happens, when perfect and deep anaesthesia is induced, a few minutes pass without its being necessary to inhale, then this rule may be relaxed. I have in such circumstances frequently had to apply the midwifery forceps, and attend to the chloroform at the same time. The safe rule is, however, exclusive attention to the inhalation.

6. I find that much of the dread which patients experience on first taking chloroform preparatory to a surgical operation, is removed by making them inhale it the day previous. Any fear or reluctance they may have had is thus invariably removed, and when upon the operating table they take it much more readily, and hence are much sooner affected.

7. If possible, the stomach should be empty, or the food should have been taken some hours before inhaling it; by this means sickness and vomiting are avoided. The nausea

previous to vomiting often depresses the strength of the pulse, and may cause alarm; but as there is seldom perfect unconsciousness, the pulse remains quick, and on the occurrence of vomiting the weakness of the pulse disappears.

In conclusion, I always take care to have a small phial with strong liquor ammonia at hand; the only restorative I have ever had occasion to use.

Aberdeen, 6th May, 1857.

OPERATION FOR STRANGULATED HERNIA ON AN INFANT.

By H. L. ATKINSON, M.R.C.S., ETC.

I WAS sent for on the 18th of February, 1856, to see James C., living at Haxby, near York, a child fourteen months old, who had been the subject of right oblique inguinal hernia from birth. This had always been reducible, according to the mother's account, until February 15, when it ceased to be so, and vomiting and constipation came on. This state of things had continued for three days when I first saw the child. I found the hernia to be of moderate size, but very tense, and its scrotal covering was distended and inflamed, and presented, at its most dependent part, an appearance as if sloughing were threatened.

The tumour was firmly constricted at the external ring. There were also constipation and vomiting of stercoraceous matter, together with troublesome hiccup. The countenance was pale and anxious looking. Pulse, 136, very small and feeble. Skin moderately warm.

I placed him in a warm bath, and for a few moments applied the taxis, though without hope of reducing the hernia. The friends readily agreed to an operation, truly as a *dernier ressort*. This I performed at 7 p.m., my friend, Mr. F. Needham, administering the chloroform.

The operation was performed in the usual way, the sac being opened, and the stricture, which was very firm and unyielding at the external ring, divided.

The contents of the sac were congested, but no adhesions were present, and they were consequently easily returned.

The wound was closed by the interrupted suture, and covered by a pledget of wet lint, which was secured by a compress and bandage.

I administered a draught containing two drops of tincture of opium and five of chloroform, and then left, with orders that a small quantity of wine should be given, with as much beef-tea as could be taken.

February 19.—Mother says he seemed much easier after the operation, slept two hours, and at 11 p.m. had an evacuation from the bowels. Has taken a little sherry and sago and beef-tea during the night; hiccup has ceased; pulse 124; no heat of skin; seems to suffer but slight pain; takes the breast freely. Ordered to omit the wine, but to continue the sago and beef-tea.

20th.—Has passed a good night; no abdominal tenderness, thirst, or vomiting; bowels open once; pulse 130; tongue moist. Greater portion of wound healed by first intention, the remainder discharges a little healthy pus.

The patient continued to improve. I removed the sutures on the 22nd, and applied a truss on the 24th. On the 28th the wound was perfectly healed, and the patient quite well.

Heworth, near York, May, 1857.

ROYAL ORTHOPÆDIC HOSPITAL.—The 17th anniversary of this institution was celebrated on Thursday by a dinner at the London Tavern, presided over by Lord Feversham. The noble chairman, in proposing the toast of the evening, "Success to the Royal Orthopædic Hospital," after explaining the scope and purpose of the institution, stated that the number of patients admitted during the past year was 1,532, the whole number admitted since the foundation of the hospital having been 19,769. The ordinary funds of the institution had continued to increase, the receipts for the past year having exceeded those of any previous year, amounting altogether to £4,022 15s. 1d. The appeal of the noble chairman was well responded to, the subscriptions announced during the evening amounting to £2,160.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

THE LONDON HOSPITAL.

UNIQUE (?) CASE OF ENLARGEMENT OF ALL THE BLOOD-VESSELS OF THE LOWER EXTREMITY—DEATH FROM HÆMORRHAGE—AUTOPSY.

(Under the care of Mr. ADAMS.)

THE subject of the following singular and very interesting case was a gentleman who had been under Mr. Adams' treatment in private for a short time prior to his admission into the Hospital, and was only received into the latter a day prior to his death, on account of the formidable complications which his disease presented. We must therefore commence the narrative from the time of the first consultation.

A gentleman, aged about 28, apparently in good health, called on Mr. Adams with the statement that he came to England from Canada in order to obtain Surgical advice on account of a bleeding ulcer on his right leg. He had been directed to Mr. Adams, and wished to have a consultation with that gentleman and Sir Benjamin Brodie. He was very reluctant to have the dressings removed from the sore, which proved to be a small deep ulcer over the outer aspect of the ankle, alleging that it was liable to bleed most profusely. The dressing immediately over the centre of the sore was accordingly not disturbed on this occasion. Mr. Adams found the whole leg and thigh the seat of the most extraordinary enlargement of the veins. Nor was the enlargement confined to the venous system; the arteries throughout their whole course were felt to pulsate most powerfully, and appeared to have dimensions of at least twice those natural to them. The whole limb was very much enlarged, being nearly twice the girth of the other. With regard to the history of his case the gentleman stated that the condition had been congenital, and that for some years the ulcer had been liable to bleed occasionally. It did not appear, however, that the hæmorrhage had until recently been very profuse, and no Surgical measures beyond pressure and elevation of the limb had ever been necessary for its control. His general health was so good, and his fear of the bleeding so little, that during the two or three days occupied in arranging for a consultation with Sir B. Brodie he occupied his time in sight-seeing. One morning Mr. Adams was called to him with the statement that the ulcer was bleeding. He found, on reaching the house, that while his patient was in the water-closet the hæmorrhage had suddenly commenced, and that a great quantity of blood had been lost before it ceased. The man was now sitting in a chair with the leg raised, and the bleeding had been quite arrested. Mr. Adams explained to him that it was now absolutely necessary that he should examine the sore, and ascertain the real nature of the disease. This, after much objection, was permitted. On removing the dressings and coagula a most furious hæmorrhage took place. The stream of blood, which was arterial, was projected with much force and with a whizzing noise to a considerable height. The limb was at once elevated, and the fingers passed into the wound, which latter was found to be a deep ulcer over the outer part of the ankle, at the bottom of which an excavation into bone could be felt. Further assistance was at once sent for, and Mr. Coulson and Mr. Ward having arrived, the propriety of immediate amputation was discussed. The patient resolutely refused to submit to such a measure, feeling certain, he said, that the bleeding would stop, as it had done on previous occasions. His confident assurance that he had known as much hæmorrhage to occur several times before induced his Surgeons to be a little less urgent in their advice to him to have the limb removed. The operation would also have been one of great danger, on account of the enormous dilatation of all the vessels. In the attempts to arrest the bleeding several tourniquets had been tried, but without the slightest effect, pressure directly on the spot being the only measure which had any influence on it. From consideration of the state of the vessels of the thigh and leg, and the probability that profuse and perhaps fatal bleeding would attend it, the operation was decided against, and it was determined to close the ulcer by a compress and tight bandage. This was done, and was quite efficient. The man had lost an

enormous quantity of blood, and was pale and blanched; he was, however, quite confident as to the result, and assured his attendants that he should recover, as he had often before lost as much and got well. The escape had, however, been so narrow a one, that Mr. Adams advised him to go at once to the London Hospital, in order that in the event of the bleeding recurring he might have assistance at hand. This he consented to, and was accordingly admitted the same evening, August 7. After the occurrence just described he was in a fairly comfortable condition. On the next morning, however, the bleeding again commenced, and more freely than ever. The house-surgeons succeeded in arresting it by pressure, and sent for Mr. Adams. On the arrival of the latter he found the man already in a quite hopeless state, and evidently dying. It was too late to think of adopting any surgical measures, and death took place within an hour afterwards. At the post-mortem it was found that all the large vessels of the limb were diseased. The femoral artery was at least three times its natural size, and the tibials were proportionately yet larger. The veins were so much dilated as to resemble rather large sinuses or blood chambers than venous channels. Their appearance and size suggested comparison with the sinuses of the uterus. The coagulum in one was at least the size of a pullet's egg. This condition, which found its extreme in the lower part of the leg, diminished gradually up the thigh. The iliac artery, perhaps a third, was much larger than natural, but its vein not so much so. The ulcer which had caused death was found to pass into the substance of the os calcis, the interior, which was involved apparently in a varicose aneurism, by ulceration of which the blood had been furnished. The bone structure was much softened and hollowed out into vascular cavities. The arteries in many parts of the limb had atheromatous deposit in their coats. There was an aneurismal dilation of the popliteal artery, about three inches in length and two in diameter; there was also an aneurismal dilation of the external iliac just above Poupart's ligament. The parts about the ankle were in a state of gangrenous disorganisation, partly, no doubt, due to the pressure by which alone the bleeding had been kept in check.

In looking at the pathology of this remarkable case, it seems tolerably evident that it was an example of congenital enlargement of all the vessels of the limb, a sort of aneurism by anastomosis of the whole lower extremity. The disease appeared, as might have been expected, to have been progressive; and it was worthy of note that the part which had given way was nearly at the most depending part of the column. With regard to what measures of treatment would be best suited for another similar case, the question is a much more difficult one. To have amputated would certainly have been to incur great risk of death during the operation; and to have placed a ligature on the femoral or iliac could scarcely have been deemed a very hopeful procedure as to immediate result. In all probability the collateral circulation would have been very quickly established, and the state of things thus made as bad as ever. The danger of secondary hæmorrhage with vessels of such abnormal size, and whose coats were also diseased, would have been very great.

HOSPITAL NOTES.

SUBCONJUNCTIVAL DISLOCATION OF THE LENS.

Mr. Dixon, in his recent excellent work on Eye Diseases, thus speaks of the accident which the following case is an example of:—"That the sclerotic and choroid should be extensively ruptured, the conjunctiva remaining uninjured, and that the lens slipping out through the rent should become lodged beneath the unbroken conjunctiva, would *à priori* appear a most improbable occurrence. Such an accident, however, sometimes comes under the notice of Ophthalmic Surgeons." Mr. Dixon subsequently mentions two cases as the only ones which his very large experience had brought under his notice. The following occurred last week under Mr. Streatfield's care at the Moorfields Hospital:—"May 14, 1857.—Rosanna Griffiths, aged 62, came in consequence of her sight lately failing her very much in the left eye. She had been 'dim-sighted' with both eyes for some years past, and since she was a child had external strabismus of the right eye, and arcus senilis was now very marked in both eyes.

"About three or four months ago she was crossing the road,

when a baker with a large hand-barrow came between her and a lamp-post, and the corner of the barrow struck her below the right eye, and knocked her down—the eye, she says, filled with blood. In a few weeks, however, the blood had disappeared, and she thought she could see rather better than before the accident.

"At the present time the iris of the right eye is tremulous, and to the extent of nearly one-third is deficient at the upper and inner part, the pupil being enlarged to an equivalent extent. When the patient looks down, and the upper lid is raised, a flattened, rounded, movable projection beneath the conjunctiva, near the margin of the cornea, at the upper and inner part where the iris is deficient, is brought into view. Of its being there she herself knew nothing. By its appearance, the history, and all the symptoms recognised, it was evidently the displaced lens. It was determined, in consultation with Mr. Dixon, to at once remove it. This was done by inserting one point of the scissors beneath the conjunctiva, and dividing it right and left, when slight pressure turned out the lens entire, enclosed in its capsule. It was in a commencing stage of cataract.

"On May 18 the wound of the conjunctiva had quite healed. With a biconvex lens she could see objects very fairly, part of the too-large pupil being hidden habitually by the upper lid."

Mr. Streatfield proposes shortly to extract the cataract of the left eye, after which operation, if successful, the woman will have her eyes each in the same condition, and, with the aid of spectacles, will probably enjoy very useful vision in that to which the accident happened.

MR. FERGUSSON'S CASE OF EXCISION OF THE THIRD LOBE OF THE PROSTATE.

We are sorry to have to state that this case ended fatally. The reader may remember that the operation was that of lithotomy in a man aged 65, the subject of a much enlarged prostate, and that after removing the calculi (two) in the usual manner the operator excised a large out-growth of the hypertrophied gland from the floor of the urethra. (See *Medical Times and Gazette*, April 18, p. 385.) The operation was performed on April 11, and as regards hæmorrhage, etc., all did well. The man, however, about ten days after sank into a feeble state, and continued gradually to decline until the 30th, when death took place. The autopsy showed the bladder congested, hypertrophied, and much inflamed. Its mucous membrane was coated by thick flakes of adherent false membrane. The wound was wanting in action, but not otherwise unhealthy. It would, of course, be unauthorized to infer that the bold practice adopted had any material influence on the result. According to the facts furnished by our Statistical Reports of operations in the London Hospitals during the last four years, at least half of the lithotomies in adults end fatally. Whether in a case of greatly enlarged third lobe of the prostate the impediment thus offered to the complete evacuation of the bladder, in case it were left, or the increased size of the wound made were it removed, would be likely to exercise the more prejudicial influence on the result, will probably be a question upon which opinions will differ. Granting, however, that the immediate danger of an operation would be somewhat augmented by such a procedure, we yet have the great subsequent advantage, should the case do well, to fall back upon. Apart from the inconveniences and dangers of enlarged prostate in itself, there can be no doubt but that the risk of a second calculous formation would not have been inconsiderable. In Mr. Fergusson's case a deep lesion was formed behind it, and in this any little fragments of stone which had been broken off would have been almost sure to remain, and might very probably become the nuclei of future ones.

SPONTANEOUS SLOUGHING CANCER.

There is a patient now attending the out-patient department of the Cancer Hospital, named Mary Punter, 52 years of age, married and mother of nine children, in whom a perfect cicatrization of a large ulcerated surface in the left mamma has followed spontaneous sloughing of a very large cancerous tumour. She came to the Hospital in October, 1855, with a large ulcerated cancer, from which there was at times very free hæmorrhage, which was stopped by the local use of the perchloride of zinc. Carrot poultices were used until January, 1857, during the whole of which time the process of ulceration and sloughing was going on. In January, the whole of the diseased mass had separated, and a very large superficial

granulating sore was left, nine inches in diameter, which has gradually cicatrized from the edges towards the circumference, and is now firmly healed over. There is no swelling in the axilla, and the woman's general appearance is that of excellent health.

IODINE INJECTIONS IN OVARIAN DROPSY.

It will be much to be regretted should the fatal case, which has just happened at the Samaritan Hospital, be allowed to at all interrupt the fair trial which English Surgeons appear inclined to give to this promising method of treatment. With Dr. Snow Beck's honest narrative before us, we must, it is true, be exceedingly cautious in the mode of performing it; and with such caution the risk of escape into the peritoneal sac will become very small indeed. Before the fluid has more than half escaped, or, if the cyst be only of moderate size immediately after the withdrawal of the trocar, a full-sized flexible catheter should be passed down the canula, and pushed in to pretty nearly its whole length. If the latter part of the fluid have escaped by the catheter, and the instrument be so far in as to be coiled within the cyst, the slipping out of its end is an accident which can scarcely possibly occur. It is quite evident, by the way, that the dangers of injecting the cavity of the abdomen can scarcely be overrated. Dr. Snow Beck's makes, we believe, the third English case in which this has happened, and in all a rapidly fatal result has ensued. In one of these, the accident occurred on account of a mistaken diagnosis,—a case of ascites having been taken for one of ovarian dropsy. These accidents, although, as we have said, pointing to the necessity for the greatest possible caution, yet must not be allowed to deter from the proper adoption of the procedure. It has now been adopted in a very considerable number of cases, and in many with very good results. As an encouragement, we must bear in mind the very serious nature of the disease for which it is recommended. Ovariectomy, to judge from the practice of the London Hospitals, seems to be well nigh discarded. It is suspected very generally that such statistics as appear to show it in a favourable light, only do so on account of their incompleteness. We may venture the remark, that the belief as to the "curing" of ovariectomy statistics is most fully borne out by all that has come to our knowledge. Since the statistics of operations were commenced in this Journal, about four years ago, about ten cases have been recorded: and it is an ominous fact, that out of these not one single case has recovered. When it is recollected that all these were performed in large Hospitals, and with every advantage that consultations, etc. could afford, the statement becomes all the more discouraging. As bearing upon the value of previous tables, and as showing the very general habit of omitting to mention fatal cases, we may add that only one or two of these ten cases have ever been made public, excepting by means of the Quarterly Statistical Reports alluded to, and, but for these, would most likely never have been known.

UTERINE POLYPI ATTACHED AT BOTH ENDS.

A single woman, aged 43, presented herself in Dr. West's out-patient's room at St. Bartholomew's, the other day, complaining of having suffered repeated floodings. The first had occurred about two years ago, and since then it had been repeated every five or six months. On examination the os uteri was found open and its lips thinned. The tip of the fore finger was easily admitted into the cervix, and just within were felt some hard knotted masses, about the size of hazel-nuts, firmly attached to its sides. They were not pendulous, and appeared to be fixed at each end, although bulging in the middle. The body of the organ appeared to be considerably enlarged, and was not improbably occupied by other polypoid growths. Dr. West remarked that the case illustrated a very troublesome form of the mucous polypus, that, namely, in which small outgrowths from the mucous membrane of the cervix take place, and instead of becoming pedunculated, retain their attachment, both above and below, much in the same way as do the earneæ columnæ in the heart. He was in doubt as to what was the best mode of treating such cases; they often gave much trouble from bleeding, and were not accessible, like others, either to the ligature or the scissors. He thought that the only way was to wait until they became protruded and acquired pedicles, and then to remove them. Meanwhile much benefit might be obtained by the use of astringents, so as to harden the exterior and

lessen their proneness to bleed. An alum lotion was ordered in the case under observation.

EXPECTED OPERATIONS.

At St. Bartholomew's, this day, (Saturday,) Mr. Lloyd has an amputation of the arm, and Mr. Paget an excision of the breast, and of a parotid tumour. At St. Thomas's, on the same day, Mr. South will perform a resection of the knee-joint; and Mr. Le Gros Clark has an excision of the elbow-joint, and a removal of the breast. At King's College, on the same day, Mr. Fergusson will perform a Chopart amputation, and an operation for prolapsus uteri; and Mr. Partridge will excise the knee-joint.

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Medical Times & Gazette.

SATURDAY, MAY 23.

THE SALE OF POISONS.

It is almost impossible to take up a newspaper without finding some case of poisoning by mistake, or of murder or suicide where the poison has been procured without the least difficulty. An old woman sends for twopennyworth of tincture of rhubarb; a baby dispenser sends her laudanum by mistake, and the old woman is poisoned. Judge and jury condemn the poor child, while his employer is let off scot-free.—Two women, at a police-office on Tuesday, were charged with attempts at suicide, one by oxalic acid and one by laudanum. One woman admitted that she had taken the enormous quantity of sixpennyworth of laudanum, which had been supplied to her by various chemists without the slightest premonitory inquiry, although the physiognomy of the suicide was photographed on her features. Mr. Burell, of the London Hospital, said that "Two empty phials, which smelt strongly of laudanum, and a scrap of paper in which the oxalic acid had been wrapped, were found on each of the women, but neither of them was labeled with the names or addresses of the druggists who had served them with the deadly contents;" and the Magistrate remarked, "That would seem to denote that they suspected her object, and were ashamed or afraid of selling it."

It is high time that a stop should be put to the practices of illiterate and ignorant persons calling themselves chemists and druggists. This is acknowledged completely by all respectable members of the trade, and we are very happy to be able to state that the President of the Council has brought a Bill into the House of Lords, "to restrict and regulate the sale of poisons." The preamble recites that the existing restrictions on the sale of arsenic have been found to be insufficient, and that the unrestricted sale of other poisons facilitates the commission of crime, and occasions frequent fatal accidents. The word "poison" is construed to include certain drugs, simple

or compounded, mentioned in the Schedule A of the Act. These consist of a large number of preparations, most of which are in common use as articles of medicine—namely, arsenic and its compounds; bichloride of mercury and its compounds; the poisonous vegetable alkaloids; prussic acid; the cyanides of potassium, mercury, and silver; the chlorides of zinc and antimony; the essential oil of bitter almonds, and any mixture containing it (as “almond flavour”); cantharides and its preparations; belladonna and its preparations; hemlock and its preparations; aconite and its preparations; opium, in tincture, extract, and powder; foxglove and its preparations; stramonium and its preparations; chloroform and its compounds; oxalic acid and binoxalate of potash; nux vomica seeds and bark; tartarized antimony and its solution; cocculus indicus (used to adulterate beer and porter); ergot of rye, savin, lobelia, and all liquids or solids containing or consisting wholly or in part of the above-mentioned poisons; poisonous drugs, and herbs. A great number of compounds, prepared according to the directions of the Pharmacopœias of London, Edinburgh, and Dublin, or any of them, are excepted.

Other substances and preparations may be added to this *Index Expurgatorius* by an order in Council. It is enacted, further, that no person shall sell any poison, on any pretence whatever, except to a person of full age, and in the presence of a witness of full age, who is known to the person selling the poison, and to whom the purchaser is known, and on production of a certificate signed by the parish priest, or a medical practitioner, or a justice of the peace, to the effect that the poison may be safely supplied to the applicant. Entries of the sale of poisons are to be carefully made by the vendors, containing full particulars of the sale of the poison, the name and address of the purchaser, etc. All sold poisons must be covered with tinfoil, and distinctly labeled with the address of the vendor, and the word “poison” cast or moulded on the bottle. Colourless solid poisons must be mixed with soot or indigo, in the proportion of 1 part by weight of soot to 15 parts of the poison, or 1 part of powdered indigo to 31 parts of the poison. Colourless liquid poisons must be coloured with a strong solution of archil. Every gift of poison will be deemed a sale. The above provisions will not affect medical prescriptions, or sales by wholesale to retail dealers, or sales for lawful purposes of trade. All poisons must be kept apart, distinctly labeled, in shops and dispensaries. Poisonous medicines for external use must be vended in blue glass bottles, of a quadrangular shape, and properly labeled. The penalty for violating the act will be a fine of £20 for the first, and £50 for every subsequent offence. Druggists will be disqualified from acting as such by a second conviction. In order to meet the case of a respectable person, with some knowledge of drugs, in the habit of taking small quantities of laudanum or other poison as a medicine, being taken ill in the streets, and repairing to the nearest apothecary’s shop for a dose of his favourite remedy, he must be prepared with a witness of full age, who is known to the druggist, and to whom the purchaser is known, or the sale will be illegal. He must also be armed with a certificate.

It will be seen that this Bill is in conformity with many of the recommendations we have made from time to time on this subject. We shall refer to the details of the measure hereafter.

THE MEDICAL REFORM BILLS.

THE two Bills brought before the House of Commons—Mr. Headlam’s Bill of the Corporations, and Lord Elcho’s Bill of the Universities—have drawn forth a sort of manifesto, which is understood to be from the pen of Dr. Alderson, and to represent the views of the College of Physicians, entitled “Remarks on Mr. Headlam’s Medical Profession Bill, and Lord Elcho’s

Opposition.” As these remarks have been circulated pretty widely, we need not do more than quote the passages relating to the chief points of difference in the two Bills.

It is stated that “Lord Elcho’s Bill, or that mutilated offspring of the Select Committee which he has adopted, is a mere Bill for a Scotch University Legislation. It proposes to remodel the system now prevailing in the English Medical Profession to such an extent as to render it wholly inefficient for the public wants, whilst the object to be effected by such revolution is simply the pecuniary benefit of the Scotch Universities.

“It is important thus to notice how extremely narrow is the source whence Lord Elcho’s opposition arises. Scotch Professors alone are the persons interested; and it is proposed that a whole Profession of a great kingdom, and the public convenience, should be sacrificed to the gains of the few Professors of a single division of the country.”

With regard to the most evident objection to Lord Elcho’s Bill, the power given to a teaching body to grant licences to practise, it is remarked, “Lord Elcho has stated, if correctly reported, that the education and degrees of the Scotch Universities, and of the London University, are in higher estimation than those of the College of Physicians. The House ought to be more correctly told that the London University is not an educating body. It is only an examining body. The comparison made by Lord Elcho between the degrees of the College of Physicians and the Scottish and London University, supposes a parallel which does not exist. The College of Physicians grants no degrees, but grants licences to practise, which they have the exclusive privilege of granting for London and seven miles round it, an equal privilege with all the English Universities for all England. The duty of the College of Physicians is to examine into the attainments of men holding all degrees, whether English, Irish, or Scotch.”

We need not say more of the two bills in their present state, than to give the constitution of the Council in each. According to Lord Elcho’s bill:—“A council shall be established, which shall be styled *The Council of Medical Education of the United Kingdom*, and shall consist of the President for the time being of the General Board of Health, and such twelve other persons as her Majesty, with the advice of her Privy Council, may appoint, of whom not less than nine shall be appointed from among persons qualified to be registered under this Act, not less than two of them being persons so qualified who are resident in Scotland, and not less than two of them being persons so qualified who are resident in Ireland.” Thus the Council governing the Profession would consist exclusively of Government nominees.

According to Mr. Headlam’s Bill, “The General Council of Medical Education and Registration of the United Kingdom, hereinafter called the General Council, shall consist of one person, chosen from time to time by each of the following bodies—that is to say: The College of Physicians of England, the College of Surgeons of England, the Apothecaries’ Society of England, the University of Oxford, the University of Cambridge, the University of London, the University of Durham, the College of Physicians of Edinburgh, the College of Surgeons of Edinburgh, the College or Society of the Faculty of Glasgow, and the University of Edinburgh; one person chosen by the Universities of Glasgow, Aberdeen, and Saint Andrew’s, collectively; one person chosen by each of the following bodies:—The King and Queen’s College of Physicians in Ireland, the Apothecaries’ Society of Ireland, the University of Dublin, and the Queen’s University in Ireland; and six persons, not being Members of Council or office-bearers in any of the said Medical Colleges or Societies, to be nominated by Her Majesty, with the advice of Her Privy Council, four of whom

shall be appointed for England, one for Scotland, and one for Ireland."

Thus in the one case there is something like self-government, in the other the Profession would be entirely subject to the direction of the State. Lord Elcho's Bill is the Bill of the Universities, and especially of the Scotch Universities; Mr. Headlam's claims to be the Bill of the whole Profession, represented by the heads of the different Corporations. If one or both fail to pass the ordeal of the House of Commons, it is to be hoped that some statesman will be found to treat Medical Reform, not as a Professional, but as a Public Question.

THE WEEK.

THE letter of Mr. Nicholls, of Dublin, published in another column, is well worthy of attention. We are informed that the Fellow of the College of Physicians alluded to is an Hospital Physician and was a Lecturer on the Practice of Physic. The Board of the Incorporated Society is composed of clergymen dignified and undignified, together with gentlemen of fortune and education, and of Fellows of Trinity College. If such persons curtail the salaries and lower the position of Medical men, what may we not expect from the pothouse guardians and contract jobbers of the workhouses? As there is a Royal Commission now sitting in Ireland to inquire into the schools in question, it should examine the expenditure as well as the income of their estates.

Vicious gossips over muffins and tea, who delight to honour the profession of physie with their critical notices, would surely feel every gratification on the perusal of the morning papers on Monday last, and of the big newspaper placards of Holborn and the Strand. Charges against two Surgeons, one for neglect of duty, another for duty over-done. Mr. Stephenson, the Medical officer of the Stepney Union, is charged with barbarous neglect of duty, for ordering an exhausted man, named Driscoll, to attend at his surgery for an order for meat, instead of visiting the patient at home. The man comes to the surgery, drags his weary way back again, and dies. Coroner, jury, Mr. Carson (another Medical man of course), and others, are all merciless on Mr. Stephenson. But when the facts of the case come out fully, there is, in all probability, no real charge against him. An order is brought to him to receive a man as a patient. He at once makes his visit, and evidently thinking that the patient is competent to the effort, tells him to come to the surgery next morning, when he will give him medicine. It is unfortunate, without doubt, that at this time an order for meat was not given without the compulsion of a journey on the following day. But, as far as we can see, all that Mr. Stephenson can be blamed for is, that he was not a prophet, and that he did not know that the man was too far enfeebled to get into the open air. There might have been an error of judgment here, and if any one will show us a man who does not occasionally err in judgment, we will join in condemnation of our brother. The second gossiping wonder is called "An awful case of Manslaughter by a Surgeon!" Mr. Moses William Morgan, of Admiralty-terrace, Vauxhall Bridge-road, is in this case the atrocity man. Mr. Morgan is called by Mrs. Fisher, a midwife, to a difficult labour, and as we gather, for reasons sound or not, according to his obstetric judgment, he performed craniotomy, and endeavoured to remove the child part by part. It seems that Mr. Morgan could not complete delivery without assistance (had he got assistance at the first all would have been well, as far as he is concerned); Mr. Knaggs was therefore called in, who had to remove the remaining part of the child by force; but the mother died. To aggravate the

details of the case, the jury were shown not only the dead body of the mother, but the remains of the mutilated infant. With their feelings thus excited, through their hearts rather than their heads, to manslaughter pitch, they brought a verdict of manslaughter against Mr. Morgan, who, having absconded, has now a coroner's warrant flying after him, and Newgate prepared for his reception. Not long ago we had an insight into the mode in which the law deals with practitioners of the Matcham school, and with the Physicians of the reformed college of New York. We shall now have an opportunity of observing the dignity of the law as displayed towards a legally qualified man.

The Metropolitan Association of Medical Officers of Health have just presented a Report on the nuisances arising from Gasworks. There can be very little doubt that the manufacture of coal-gas, although a most useful operation, is one of a most offensive description; and indeed it is a matter of wonder that persons living in the vicinity of these works are not more often the victims of disease than appears to be the case. Their immunity can only be accounted for on the principle that habit accustoms human beings to bear deleterious influences which, when newly introduced, might be most pernicious. In the first place, clouds of smoke are evolved on the charging and emptying of the gas retorts, and this smoke often blackens the air in the vicinity. Then the purification of the gas occasions the deposition of a number of nauseous and poisonous materials, which being volatile, are again sent forth into the atmosphere. When we mention that the chief volatile products are sulphuretted hydrogen and hydrocyanic acid, not to mention ammoniacal and tarry matters, it may readily be supposed that a great gas-work is a focus of pestiferous emanations. In a scientific point of view, nothing can be more instructive and interesting than the manner in which coal is made to yield up its illuminating material for the service of man in our great cities, and it is equally wonderful to observe how the progress of discovery has enabled the gas manufacturers to economize their resources and utilize their materials. In illustration of the latter remark, we may observe that a gas-work is a world in itself, and with a supply of coal, and lime, and water, all the operations may be carried on without extraneous assistance. The refuse coal from the exhausted retorts becomes the coke which heats the fresh coal, and the lime used to purify the gas is afterwards employed to lute on the stoppers of the retorts. It is also not an uninteresting circumstance, that the various preparations of ammonia, employed to revive the drooping powers of the sensitive lady, or to rouse the flagging energies of the exhausted victim of fever, are mainly derived from the filthy refuse liquor of the gas-works. But the chemical operations required for effecting these wonderful changes are of a most offensive character, and on this account they have lately attracted considerable attention, and have been made the subject of the Report to which we have alluded, from the Metropolitan Officers of Health. The document, however, is a very mild one, merely suggesting some improvements in the practical details of gas-making, the very nature of which necessitates the evolution of a host of offensive effluvia. The only possible remedy is, to remove the gas-works to a distance from human habitations:

According to Sir George Grey's Bill for transferring the powers of the General Board of Health to a Committee of the Privy Council, Her Majesty, by Order made with the advice of the Privy Council, will appoint a Committee of her said Council, to be styled "The Committee of Council for Health;" and on this Committee being appointed all the powers of the Board will cease, and be transferred to the Committee.

Nothing is said as to the number or constitution of the Committee, and it remains to be seen whether the health of the State is to be entrusted to Medical men or Government clerks.

The letter of Mr. James Bird, to be found among our General Correspondence this week, on a Civil Service Medical Department, well deserves both perusal and consideration. We have frequently suggested a similar plan, and should be glad to hear that means were taken to bring the proposal before Government.

The letter of Dr. Hinds, of Birmingham, published in another column, on arsenical poisoning by the papering of rooms, is worthy of special attention. Dr. Hinds has sent us a specimen of the paper, which is a green flock. It has been examined by Dr. Alfred Taylor, who kindly informs us that the bright green colour of the paper is owing to the arsenite of copper, or Scheele's green, a compound containing nearly half its weight of arsenic. Dr. Taylor has also furnished us with two pieces of copper gauze and copper foil covered with arsenic deposited from about *one square inch* of the paper. He pointed out some years ago (in his work on Poisons, p. 465), the danger arising from this substance when used in inhabited apartments. It is a most dangerous compound, especially where, as in the paper sent by Dr. Hinds, it is loosely laid on in a pulverulent state.

The senior surgeon of St. Thomas's Hospital has just brought out a shilling pamphlet on hospital nurses, and the training establishments for hospital and private nurses. He has been made very angry by an anonymous letter in the *Times*, and he upholds the character of the "seven male surgical sisters," and the "four female surgical sisters" of St. Thomas's Hospital, against the "false and scurrilous" statements he denies; indeed, he thinks the nursing system in the London hospitals is as good as it is likely to be, and better than it will be if the scheme of Miss Nightingale and her supporters be carried out. We believe the truth will be found somewhere between the two parties; and that while the nursing system in our hospitals is not so black as it is painted, there is still room for amendment—that while there are a great many good nurses in the wards, both "male sisters" and "female sisters," there are also some bad ones; and as to the proposed training institution, we may say, after experience of the working of the lady-nurse system in the East, that our good nurses may be made better, and our bad ones good, by the example and supervision of ladies of education.

REPORTS

ON

THE RELATIONS OF FOOD AND DISEASE.

No. V.

DISEASED MILK: ITS CHARACTERS AND EFFECTS.

THE microscopical characters of diseased milk have yet to be wrought out more carefully. We shall report on this question in an original way in due course, for time is the first consideration in all scientific inquiries. Meanwhile, such work as has been performed in this direction may be briefly stated, and suggestive matter supplied.

We have seen that the microscope may reveal the presence in milk of infusoria. These are so rare that it is unnecessary to dwell further on the point. But the fact itself supplies the suggestion, whether or not other forms of organic growths may be transmissible through the same medium.

Amongst animals at the breast, the entozoa are, we believe, not very commonly present, and there is difficulty in supposing the transmission of the ova of the entozoa through the lacteal

secretion. At the same time, the question of such transmission must not be overlooked.

The presence of pus in milk, has been fully demonstrated by various observers, as a diseased product. The cause of its presence may be local, as from mammary abscess, or from mere pustular eruption affecting the nipple. But the cause may also be general, and may depend on various diseased states of the animal secreting the milk. In a case of pleuropneumonia, Quevenne detected pus globules, and the same in a case of simple pneumonia. In the disease called "cocotte," according to M. Donne, pus globules are also present. In cases of phthisis pulmonalis in women, Quevenne sought for pus globules, but did not find them.

Pus globules are distinguished from the ordinary milk globules by striking peculiarities. Chevalier describes them thus: "The globules of pus offer a dotted surface and an irregular outline; they are insoluble in ether, soluble in a solution of caustic soda, whilst the milk globules are soluble in ether, and insoluble in caustic soda. They present a surface uniform and transparent, and an outline terminal and regular."

The microscope assists also in the detection of the colostrum corpuscles. These corpuscles are granular and of a yellow colour. Their size is much larger than the ordinary milk corpuscle; they vary from the one two-thousandth to the one three-hundredth of an inch in diameter. They are irregular and disproportionate. The following description is given by Lehmann:—"They, (the colostrum corpuscles,) are irregular conglomerations of very small fat globules, which are held together by means of an amorphous somewhat granular substance. The fat granules of these masses are more easily dissolved by ether than those of the milk globules; acetic acid and potash dissolve the granular combining substance, and scatter the fat globules; an aqueous solution of iodine imparts an intense yellow colour to the colostrum corpuscles. There can, therefore, be no doubt that these molecules are merely very small fat globules imbedded in an albuminous substance. There is no appearance either of a nucleus or of an investing membrane." Donné says, the colostrum milk is a yellowish fluid. It contains some real milk globules, but they are irregular and disproportioned. The majority of the other globules are small, and appear like dust in the midst of the fluid. These globules, instead of swimming separately, are mostly connected together by viscid matter, and are in small agglomerated masses. There are also small granular bodies connected together or enclosed in a transparent envelope, and frequently within one of these there is a small milk globule. The colostrum corpuscles, as we have seen, disappear a few days after the commencement of lactation, as a general rule. But in impoverished animals they often last a long time, and they may return during lactation on the occurrence of inflammatory diseases.

Blood corpuscles are easily detected when present in milk, by their disc form and other well-known characters. Mixed with milk, however, they undergo changes of form according to the density of the fluid.

The odour of milk may undergo changes from disease, but this is not often met with. A fœtor has been described, and a peculiar sour smell.

It has long been known that various substances (medicines or poisons), influence materially the qualities of the milk of the lactating animal. Some vegetable substances, as carrots and turnips, give a yellowness of colour and an assumed richness. Mitchell, however, from tables by M. O. Henrie and Chevalier, shows that the feeding of cows on beetroot or on carrots makes some real difference in the constitution of their milk. (a) When fed on carrots the proportion of casein was as 4.20, of butter 3.08, of sugar of milk 5.30, of salts .75, and of water 86.67 per cent. When fed on beet there was of casein 3.75, of butter 2.75, of sugar of milk 5.95, of salts .68, and of water 86.87 per cent. Thus while the proportion of water remained the same the proportion of casein, butter and salts was greater under the carrot diet, while the sugar of milk increased under the beet dietary.

The influence of "grains" in altering the milk of the cow has been suspected, and there is no doubt that in excess "grains" do great mischief to the health of the animal; but to what extent the bad health so induced modifies the milk has not yet been satisfactorily ascertained. Under some forms of diet the milk-producing power of the cow is enormously

(a) Mitchell on Falsifications of Food, pp. 74, 75.

increased, and the milk is supposed to exert an injurious influence on those subsisting on it. Dr. Hassall quotes from the *Veterinary Record* of 1850, the following extract from a New York paper, which shows the effect of distillers' wash on cows:—"There exist on Long Island, near Brooklyn, several manufactories of milk, the process of conducting which should be known; one of these dairies covers a space of 600 feet front, by 300 feet deep, carefully fenced in so as to be as private as possible, the business of the people being to drink the milk, not to know how it is made; in which enclosure 400 cows are kept the whole year round. These cows are fed on the refuse slop of whisky distillers, and it is given to them warm. Such is the fondness of cows for this vile compound, that after having fed upon it for a week or more, their appetites become so depraved, that they will take no other food. The result is that their milk-producing organs are stimulated to a wonderful degree; they yield enormously, but soon become diseased; their gums ulcerate, their teeth drop out, and their breath becomes fetid. Though thus diseased, they do not fall away in flesh; but on the contrary, puff up and bloat to an appearance of great fatness; their joints become stiff, so that they cannot with ease lie down, and rarely or never come out alive. Bad as this is, their milk is afterwards mixed with molasses, water, and whitening, and these sold to the public of New York for pure milk! It is of course very injurious to children, who use it in much greater quantities than adults." It is unfortunate that the history stops at this point, and that neither the diseased characters of the milk itself nor of its special influence are detailed. But as in London and other large towns, the brewer's refuse is used largely as cattle food, the statement given above deserves remembrance.

In reference to the effects of summer and winter diet on the milk of cows, Chevallier observes, that the change from summer diet (from May to November, including trefoil or lucerne, maize, barley, and grass) to winter diet (from November to May, including trefoil or lucerne, oat, straw, and beet-root) produces little variation in the density of the milk. In winter the water decreases, the butter augments; in summer the milk gains water, and loses some of its solid parts, its casein, sugar and salts. When cows are kept in stables during the whole year, a variation in nourishments (excluding those which have a disagreeable smell, as cabbages, turnips, leeks, and onions), and care with regard to the cleanliness and quiet of the animals, have a favourable influence on the quality of the milk. Lastly, the milk of cows fed in Paris contains more water and less solid parts than that of cows fed in the country.

The age of the milk-giving animal has been by some authors supposed to influence the nourishing property of the secretion. Becquerel and Vernier believe that age exerts no influence. Climate, variations of weather and season, contribute to produce modifications on the health of animals and the milk they supply. The extent and nature of such variations are yet unknown.

After long-continued lactation, the milk loses its supporting power. It has a bluish white colour, yields but little cream, and gains in water.

¶ Neglect in the housing and in the hygienic conditions of milk-secreting animals leads always to derangement of health and to a deterioration of the milk proportionate to the neglect. In some of the extreme examples of horrible cow-housing in cities, where the animals die by dozens in poisoned air and filth, the milk has been described as fetid; but its exact condition has not been investigated.

The effects of an unnatural system of diet on the milk of lactating women embraces a wide subject of research, hitherto but little inquired into. We can, however, speak from experience, in saying that we have sometimes seen the most impoverished women supporting on the breast alone babes in the most excellent health, and having the appearance of being exceedingly well nourished. On the other side, we have seen women fed up in an ample and even extravagant way, whose children, fed only on the milk, were the victims of dyspepsia and impoverishment. It is difficult to account for these facts, but they are facts, and they demand full consideration in an experimental point of view. What are the effects of malt liquors, in excess, and of spirits in relation to the milk of suckling women? What in relation to the child?

Women are frequently aware themselves of the influence of some articles of diet on their children. They have a prevalent notion, that fruits and other acid substances derange the infant's digestion, and set up diarrhoea; and the evidence on

these points seems tolerably conclusive. In like manner, in prolonged lactation, often prolonged beyond all reason, for the purpose of preventing another pregnancy, they are conscious that the milk has little supporting power, and that stomach derangements attend its use.

In instances of this character, it is not necessary to suppose that any abnormal agent is being introduced into the infant's body through the milk; but rather, that as the increasing demand for food in the growing child has gone on side by side with the decreasing virtue of the milk, the nutritive process is necessarily conducted imperfectly. For the opposite reasons, in the first stages of lactation, the child, with its digestive necessities less urgent, may become disordered from a milk highly charged with nutritive material. Sir Astley Cooper noticed a deficiency of cream in the milk of a woman who was much impoverished, and who had an exfoliation of the frontal bone.

The transmission through milk of certain agents, taken either as medicines or as poisons, and the influence of these agents on the child is a fact long since known; and we are somewhat surprised to see Lehmann passing over this essential point in a few lines, as though it were a mythical idea. So far from this being unimportant, we think the evidence is pretty certain, that all soluble poisons admit of being thrown off in the lacteal fluid. "Peligot and Herberger," says Lehmann, "have detected iodide of potassium in the milk of women, but there is no certain knowledge of any other substance being thus secreted." We have ourselves proved, however, the transmission of antimony through the milk of one of the lower animals. To a cat, that had given birth to five kittens, one-third of a grain of tartar emetic was given twice, at intervals of eight hours. These doses caused vomiting, and so much prostration, that the course was changed to one-twelfth of a grain, which dose was repeated twice daily. Three days after this, one of the kittens was drowned, and its viscera was subjected to analysis, with the result of detecting distinct evidence of the poison. Three days later still, the mother still receiving the poison, two of the other kittens were killed. In these the poison was detected in the heart, including its contained blood and lungs taken together, in the liver and kidneys taken together, and in the stomach and intestinal canal, taken together with their contents.

Chevallier and Ossian Henry found by experiment that the following substances were easily detected in milk:—common salt, very abundantly; bicarbonate of soda, distinctly; sulphate of soda; iodide of potassium; oxides of iron and zinc, and subnitrate of bismuth. Quinine, nitrate of potash and mercurial salts could not be detected by these experimentalists.

An interesting trial took place in France some years since, on the question whether the milk of a cow could prove poisonous, from her having partaken as food of a poisonous plant. The case was investigated by Chevallier, and Drs. Cottureau and Bayard; and the facts were these:—

On June 12th, a servant girl milked her three cows into a pail *without metallic rings*, and afterwards poured the milk into a stoneware vessel. The milk was eaten with bread for supper by eight persons out of nine. The next morning they were attacked with acute pain in the bowels, purging, and vomiting; the pulse was full and quick, the skin hot; the patients were restless and thirsty. The only one who escaped was the person who had not partaken of the milk. On June 13th, another woman milked the same cows into the same pail, and took home some in a stoneware vessel. She, her husband, brother, and grand-daughter ate it at supper; and all had colic and purging. The severity of the symptoms appeared in proportion to the quantity of milk taken. All the patients recovered by June 26th.

One of the three cows had an engorged teat on June 12; and it was difficult to milk her. No attention was paid to the colour, smell, nor taste of the milk.

Analyses were made of the vomited matters, but nothing was discovered. The available quantity, however, was very small. Two specimens of milk taken on June 16th from the cow with the engorged teat were examined; nothing was found abnormal.

M. Chevallier and his colleagues, reasoning on the symptoms, referred them to poison—but not to mineral poison. As to vegetable substances, they observed it is well known that several species of euphorbia eaten by cows communicate purgative properties to the milk: and other plants, as hemlock, may be dangerous to the cow, and may alter the

quality of the milk. Feeding on wormwood, Alpine sow thistles, or artichokes, makes the milk bitter: and the same occurs when goats feed on large quantities of the shoots of elder (*sambucus*) or potato-leaves. A taste of garlic is often communicated by eating the plant.

M. Virey says, that in Tennessee, U.S., there is a poisonous plant which is eaten by the cows, and does them no harm; but the milk produces in those who use it nausea, vomiting, and vertigo, ending sometimes in paralysis, and sometimes in death, on the sixth or seventh day. Cases have been related in which dangerous symptoms and even death have followed the use of goat's milk. This poisonous action of milk has sometimes been attributed to the animals having fed on *euphorbia esula*. Chemical analysis has never yet found any vegetable poison in the milk. Chevallier and his colleagues concluded that the milk was rather poisoned from the cows having eaten some noxious plants, or from the disease in the teat of one of the cows. No search seems to have been made for poisonous plants in the pasture where the cows had been feeding—a serious omission. (a)

In some forms of disease the milk of women has been found to contain products resulting from the disorder. In a case of Bright's disease of the kidney, occurring in an enfeebled woman, with a child at her breast, Dr. Rees obtained a fine specimen of urea. The infant, notwithstanding, thrived and was well nourished. The history of the case is given in *Guy's Hospital Reports*. (b)

In some instances the milk is overcharged with saline material. In the milk of phthisical cows, as has once before been stated in these Reports, the phosphate of lime has been found increased to the extent of seven times as much as the natural standard. What the influence of such milk may be on the partakers of it, has not been well traced, but Pereira makes proper use of the fact, by commenting on the propriety of never entrusting the suckling process to a phthisical mother or nurse. Quevenne, in recording his inquiries on the condition of the milk in the phthisical woman, does not seem to have met with this excess of phosphate of lime; but he describes the milk of phthisical women as of a bluish white colour, and free from opalescence, not wanting in solids, containing little butter, but giving no indication of pus globules. An increase in the saline matters of the milk seems sometimes to occur without indication of disease on the part of the mother. In the first volume of the "Archives of a Society of Physicians practising in Riga," published in 1839, Dr. Hartman relates a case in which the child of a healthy woman commenced, five weeks after birth, to suffer from purging and loss of flesh. After the usual remedies had been given in vain, the mother observed that the child refused to take the right breast, and that when its lips touched the breast it began to cry. On inquiry into the cause of this it was ascertained that the milk of the right breast had a strong saline taste, while that of the left breast had no such peculiarity. There was no difference in colour or consistence in the milk of the two glands. After these observations were made the child was only allowed to suck at the left breast. In a few days all the symptoms of diarrhoea entirely disappeared. We leave this case as it is reported. No analysis was undertaken to find what was the saline substance thus abnormally secreted.

There is a disease in cattle called in France "Maladie des Sabots." Professor Spooner kindly informs us "that this is the disease known among the Veterinary Profession in England as the 'Vesicula Epizootica,' an affection which principally prevailed among the bovine animals in 1839, and during several succeeding years. The disease is usually ushered in with slight symptoms of catarrh and general fever; in its further progress vesicles form within the mouth and around the hoofs. In some instances the whole of the sensitive structures of the feet become involved, giving rise to general sloughing of the horny covering. The disease at the same time is seldom fatal, but it appears, when affecting cows, to have an extraordinary effect on the milk, diminishing that secretion in quantity and deteriorating it in quality."

The particular changes which milk undergoes, during the existence of the "Maladie des Sabots," have been carefully investigated by M. Herberger. We give his observations as they are supplied by Chevallier:—"In the first stage of the

malady the milk is alkaline and imperfectly coagulated by rennet. The butter globules are confused, and have not a distinct outline. In the second stage the milk is imperfectly coagulated by rennet, is viscid, and has a disagreeable putrid smell and taste. It contains carbonate of ammonia, and twice as much saline matter as milk that is healthy." Evidence is wanting as to the effects of this milk on animals taking it as food.

The milk passed in the first days of lactation contains the colostrum corpuscles, and is known even by the vulgar to possess purgative properties. In some country districts, such milk is considered a treat, and the farmer, when his cow calves, sends round to his neighbours a basin of "beastings" for the express manufacture of a "beastings pudding." Our Cockneys, accustomed to the refinements of St. Paul's Churchyard, turn up their noses, and, for anything we know to the contrary, their stomachs also, at the idea of such a feast. But beastings pudding after all is a luxury, and beastings milk, in a physiological sense, is very natural in its meaning. It is the normal substitute for the nasty castor oil of nasty Sairey Gamp. We must therefore not look on colostrum corpuscles as unwholesome in their right place. In some instances, however, the colostrum lasts a long time, and becomes the cause of a constant diarrhoea in the suckler.

Donne gives an example in which the colostrum corpuscles remained in a woman's milk for a considerable period. Eighteen days after its birth her child suffered from diarrhoea, which continued for twelve days, when death took place. This woman had lost a previous child in a similar manner. Donne inferred, from the circumstances of the case, that the milk was the cause of the continued and fatal flux.

REVIEWS.

Elementary Treatise on the Wave-Theory of Light. By HUMPHREY LLOYD, D.D., D.C.L., etc. Second Edition, pp. 208. London: 1857.

THOSE who study Natural Philosophy are well aware that of the two theories which have been entertained as to the nature of light, the undulatory theory is now generally preferred to the corpuscular, which, however, was maintained by no less an authority than Sir Isaac Newton. The work before us gives a profound analysis of the different phenomena of Light in accordance with, and in support of the wave-theory, and it will no doubt become, if it is not already, a text-book on the subject.

A Manual of Photographic Chemistry, including the Practice of the Collodion Process. By T. FREDERICK HARDWICH. Fourth Edition; pp. 390. London: 1857.

THE rapid sale of the former editions of this work prove how popular it has become, and it is necessary for us to do little more than to state that the author has carefully recorded all modern improvements in photography, and that his manual is a necessity for all who practise this very delightful art, as well as for those who desire to understand the theory on which its operations are based.

A Popular Treatise on the Causes and Prevention of Diseases. By SAMUEL FENWICK, M.D. Vol. I. Diseases of the Throat and Lungs. Pp. 220. London: 1857.

THIS book appears to be one of a series upon all the diseases which afflict human nature. How far it may be practicable or desirable to give a popular history of all the maladies which have been described in our nosologies we are unable to determine; and in the absence of any explanation on the part of the author of the present volume, we know not to what extent Dr. Fenwick intends to pursue the subject. The topics which are discussed in this first part are Scrofula and Consumption, Clergyman's Sore Throat, Catarrh, Croup, False Croup, Bronchitis, and Asthma. The descriptions given of these affections are written in a purely popular style; and while their causes and the means of their prevention are insisted upon at considerable length, the Medical, or rather the Therapeutical, treatment is, we think, very properly omitted. To put a number of formulæ and remedies into the hands of the general public, who cannot possibly know the times and circumstances which demand their employment, is a most dangerous and improper proceeding; but to diffuse sound

(a) Annales d'Hygiène Publique, vol. xxxv. 1846. P. 139 et seq.

(b) New Series, vol. i. p. 328.

principles of hygiene among the reading community is a praiseworthy duty, and this duty, as far as we can judge from the specimen before us, Dr. Fenwick will perform with credit and utility.

Statistics of Insanity: being a Decennial Report of Bethlem Hospital, from 1846 to 1855 inclusive. By W. CHARLES HOOD, M.D., Resident Physician to Bethlem Hospital. Pp. 121.

BETHLEM Hospital offers abundant materials towards the establishment of correct views of the causes, the varieties, and the treatment of insanity; and the present contribution to psychological science offered by Dr. Hood will be perused with great interest. The statistics are abundant; the condition in life of the patients, their residence, the causes of their malady, their behaviour, the period of their attack, and many other particulars being recorded with great care. The chapters on the treatment of insanity, and the remarks upon the pathology of this malady are not very copious; but the work professing to treat only of statistics, and being addressed to the Governors of the Hospital, any lengthened dissertation on such topics would, perhaps, be foreign to the purpose of the author. We may observe, however, that, on the subject of therapeutics, Dr. Hood is opposed to general bleeding in the treatment of acute cases, but speaks approvingly of shaving the head and administering purgatives; and he regards opium or morphia, alone, or in combination with antimony on the one hand, or with stimulants on the other, as most valuable medicines in the treatment of the insane. He is, of course, opposed to mechanical restraint, except by separation in padded rooms, and recommends seclusion from relatives and friends. A generous diet is found generally preferable to a restricted one, and exercise in the open air is one of the most important elements in promoting the recovery of the patients. Although Dr. Hood's views are those which are entertained by most Physicians engaged in the treatment of the insane, yet they have considerable value, as being based upon the observation of numerous cases in our most important Metropolitan Lunatic Asylum.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON THE EMPLOYMENT OF PRESSURE IN PLACE OF TRACTION IN DELIVERY.

By Dr. V. RITGEN.

Dr. V. Ritgen observes, that while natural delivery is effected by the exertion of a pressure which keeps all the parts of the child compactly together, and is most favourable for its passage through the pelvis, and the preservation of its life, when the accoucheur interferes, his procedures consist in the employment of some means for effecting traction, during which the ovoid form of the child becomes disturbed, and its successful delivery rendered more difficult. The object of the present paper is to suggest that on several occasions pressure may be substituted for this traction; but we are of opinion that the practices he suggests are frequently resorted to by accoucheurs, and scarcely called for a formal statement from so eminent a practitioner.

Having observed practitioners who, after separating the limbs or head of a premature infant, while making traction, passed up the hand above the remaining parts, and brought them down in the hollow of the hand, he preferred performing this manœuvre for the entire child, without practising any preliminary traction. He adopts the same practice in the case of putrid children, and when the placenta or large coagula are detained. When there is a vertex presentation, and the external parts are insufficiently dilated, while the pains are so severe as to threaten rupture, he makes pressure in the interval of the pains through the lower part of the rectum; and when the hastening of the passage of the head is a matter of urgency, he passes one or two well oiled fingers high up into the rectum, directing pressure downwards and forwards. The anus is in these cases very yielding. In his Klinik he is in the habit of exploring pregnant women not only by the vagina, but by the rectum.

For several years past the author has had recourse to pres-

sure, when it has become necessary to expedite foot presentations. He passes his hand along the spine of the child, places the index finger on the shoulder on one side of the neck, and the middle finger on the other side, and surrounding one arm by the thumb, and the other by the ring and middle fingers, makes pressure downwards; but how this movement is distinguished from traction it is not easy to see. When the child is large, has descended low down, or the parts of the mother resist, the application of the hand along the spine may require some manœuvring; and, other means failing, the child's body should be pushed back as far as the knees, in order to let the hand pass. This seems to us questionable practice; while other directions given by the author for acting by means of pressure upon the head in foot presentations are more ingenious than practicable. However, the author's chief object in the paper is merely to suggest the inquiry, how far the principle of pressure can be advantageously substituted for that of traction.—*Zeitschrift für Geburtsh. Band viii. pp. 233—237.*

ON THE PREVENTION OF CONSTIPATION.

By Professor PHŒBUS.

Professor Phœbus, of Giessen, refers habitual constipation to the following causes, which may either act separately or in combination:—

1. The too spare employment of articles of diet which promote the action of the bowels. Among these water is to be placed in the first rank. Either from its not being of convenient access, or its quality being bad, this drink is taken by many in insufficient quantity. In sedentary occupations the sensation of thirst is too seldom excited, and the habitual frequency of such sensation may become much diminished if the satisfaction of the call be neglected. To this class of aliments also belong fruits, salads, sour milk, honey, and fat. Many country people, who sell all their produce, eat little of these things except salad; and the poorer inhabitants of towns often get them only in insufficient quantity. Those persons who can procure them usually eat salads and fats in too small quantities; sour milk easily excites diarrhœa, fruits may cause flatulence, and honey is not always obtainable good.
2. Too little bodily exercise.
3. Want of exercise of the powers of the large intestine. This is the most influential of all the causes. It is an error to suppose that the power of the will extends only over the sphincter; for it prevails much higher, only it requires considerably more time for its exertion. Several minutes, or a quarter of an hour, may be required to initiate the evacuator movement, and the uninitiated may fail altogether in the attempt. By exercising it, we increase the disposition of the intestine to act, but, under any circumstances, this is rarely the case in less than five minutes. By paying attention we may plainly feel the intestinal movement, and convince ourselves that it is independent of the action of the abdominal muscles; for although the action of these give the first impulse to the movement, they contribute little or nothing to its progress.

Numerous are the remedies which have been recommended for constipation; but the action of medicinal substances in so chronic an affection may easily become prejudicial, and especially such as exert a chemical or functional action, such as the salts or drastics. In the great majority of cases no other means are required than those indicated by the above-mentioned causes. The commonest of these is the want of exercise of the large intestine. If a stool is desired, the patient must earnestly practice the necessary gymnastic, which consists in alternate movements of the rectum as during actual evacuation, and in rapidly drawing in and then expanding the abdominal muscles. Such movements may be commenced in the chamber and completed in the closet, several minutes, a quarter of an hour, or even more, being required. If evacuation has commenced, but has not proved productive enough, the movements must be continued, the person making a firm resolution not to quit the closet until the aim has been completely attained. The movements are, in fact, the same as those normally employed; but they are more rapid, and continued for a longer time. Kneading and rubbing the abdomen, recommended by some, are also useful, but as a general rule they are quite unnecessary; and may be reserved for those who are not able to follow the above directions, such as children, insensible persons, &c.

As a general rule, an adult should compel a stool every day; and the author does not agree with the statement that

some individuals may be content with fewer, believing that such constipation often aggravates morbid conditions. In from four to eight weeks, and without the necessity of observing the same hour, a complete mastery may be acquired over the intestine, so that a stool may be always secured once in the twenty-four hours. Although this is the most powerful agency in overcoming habitual constipation, and will succeed alone, yet it acts more efficiently when conjoined with articles of diet favourable to an open state of the bowels. A larger quantity of water will be more easily drank if at first carbonic acid gas be added. An adult, during winter, should take from sixty to eighty ounces daily (deducting from this the equivalent of any artificial drinks he may take), a larger quantity still during great bodily exertion, and from one-and-a-half to twice the quantity in summer. When raw fruit gives rise to flatulence, it may be taken cooked with spices, and especially when dried and cooked. With greater regularity of stools, also, flatulence becomes less, the food being retained for a less time within the canal. Other articles of diet, as salads and fat, should also be taken in moderation. Exercise, whether on horseback or foot, if continued, is of great service; but it exerts no sudden effect, and at first may even induce constipation.

Trying the plan upon himself when a student, the author has, during his twenty-eight years of practice, recommended it to an immense number of persons, and in the great majority of cases with complete success. For himself he has attained the power of procuring a daily stool at any convenient time between four o'clock a.m. and mid-day, the average time required being a quarter of an hour. Only on one occasion during thirty years has he failed in his object. Where it fails it is from the want of the necessary strength of purpose. The plan is not so suitable for the aged; and is inapplicable to women during advanced pregnancy, or in organic disease or prolapsus of the uterus. When from insufficient perseverance the means does not succeed, cold water clysters form the best supplement; and, exceptionally, salt and oil, with camomile tea, etc., may be thrown up. The author never gives purgatives by the mouth in chronic constipation, believing it to be most impolitic to irritate the stomach and small intestine, disturbing chylopoesis, and introducing into the blood materials that are always more or less injurious.—*Präg Vierteljahr*, Band lii. pp. 121—130.

FOREIGN CORRESPONDENCE.

FRANCE.

[From our Paris Correspondent.]

PARIS, 18th May, 1857.

WITH the last winter days all marks of irritation have disappeared from our Medical Societies. The warm weather has soothed people; our Academies are looking quiet; calm and cool speeches are delivered; the debilitating influence of heat is already felt upon the speakers and the assemblies. W. Falconer has said that hot climates increase the faculty or power as well as the accuracy of sensation or feeling. He thought that this sensibility of the body was communicated to the mind, and so explained the passionate temper and vindictive disposition which, he believed, prevailed in warm seasons. But the great writer upon the temper and manners of mankind, Montesquieu, had expressed a contrary opinion long before. According to the author of the "Spirit of Laws," perspiration weakens the body in hot seasons, and deprives it of vigour and activity; this languor is communicated to the mind, which is debilitated in the same manner, and becomes timid and indolent. Such is the true physiological cause of the benevolence and charitable dispositions of some members of the medical family at this time of the year; if their passions are not very strong, nor kept in the summer in a perpetual state of irritation, I ascribe that effect to a physical law, rather than to a radical change in their tempers.

Another influence is now moreover mitigating the character of some renowned members of the profession in the capital. I mean the departure of several for the Spas of France, and the great business of directing the greater part of the fashionable world of Paris to the watering places. In France, more than in England, perhaps, the greater number of patients leave the town in the beginning of the summer to

take their residence near some mineral waters. The use and power of these different springs require a particular disquisition for every disease. There are some pathological cases which can almost indifferently be sent to different watering-places; but these are an exception, and unless for such diseases which are most obviously curable by sulphurous or ehalybeate, or alkaline waters, it requires an accurate knowledge of the properties of each spring to decide whether it will be more suitable to one patient than to another.

Until the last few years, all that concerns the medical administration of our watering places was left to private enterprise. The physicians practising in each locality connected with the owners of the spas, extolled to an incredible degree the properties of the springs. Every disease was to get there a speedy cure, and no chronic case was excluded from the list. Now, the government has taken better care of the patients, and of the dignity of the medical profession than formerly. In all our mineral springs which are a place of resort to invalids and other people, there is an inspector of the spring, who has the charge of delivering tickets of admission to the baths, and of reporting to the Board of Health, at the end of the season, the number and the character of the diseases of which he has taken care, and on the therapeutical efficacy of the waters in each case. Such a plan, if well applied and pursued, would surely give, in a few years, very valuable information on the action of mineral waters. Unhappily, well framed as the system may be now in this country, its application meets with considerable practical difficulties.

First of all, besides the inspector and the assistant-inspectors of the spas, these places are, during the watering season, the residence of a considerable number of practitioners who have no official appointment, but who, notwithstanding, are invested with the right of delivering tickets of admission to the waters, in such a manner that the official and very often the most duly qualified judgment of the first physician is in a great number of cases totally impaired.

It is not necessary to describe the particular competition and contest of the practitioners who attend to the watering-places; their different ways of laying hold of the patients at their arrival in the locality; the tickets, prepared beforehand, delivered to the invalids at the same time and in the same manner as they get information about hotels and conveyances. All these are curious and characteristic features of the medical profession in our time. More learned than in the past century, it still bows sometimes to those suggestions which depreciate the noblest of arts. I do not speak of the most opposite opinions that are often in the same residence maintained by clever physicians, as to the properties of the spring in curing some diseases, as gout, diabetes, etc. My conclusion in these cases is that there is, besides great obscurity, a particular interested motive to account for the unsettled state of the question.

More than three hundred years ago the University of Paris, in one of its decrees, prescribed to the doctors to maintain always the dignity of the profession in themselves and in others, and never to degrade it, so as to make it a trade. Moreover it enjoined them by the same statute to be on good terms one with the other. *Scholæ medicæ doctores amicitiam inter se eolant, nemo nisi legitime vocatus ægros invisat.* It is not denied that the character of the profession has since made in France indisputable progress, but such is the power of certain enticements, that till now one may say of the opinions of several clever physicians about the therapeutical effects of some mineral springs, that they have no better reason than *animo eontradiendi et per invidiam*, and the former popular saying is yet sometimes very true—*non est invidia supra medicorum invidiam.*

GENERAL CORRESPONDENCE.

ANOTHER CASE OF ARSENICAL POISONING BY A DECORATIVE WALL-PAPER.

[To the Editor of the Medical Times and Gazette.]

SIR,—Since I drew attention to this subject in the columns of the *Medical Times and Gazette*, No. 346, of February last, several additional cases have come under my observation. From these I have to submit the following, the particulars of

which may be strictly relied on, and were gained by myself in a personal interview with the gentleman who is the subject of them.

In the early part of last year (1856) a gentleman in business in one of the central parts of Birmingham, and being in perfect health, as were also those about him, had two parlours newly papered with a bright green paper. In less than a week afterwards he became ill, but knew no cause for his illness. Both himself and his wife sat in one of the rooms regularly, burning a gaslight, the days being not long. At the same time also as his own illness came on, his wife became ill in a similar manner, and was occasionally confined to her bed. The symptoms complained of were severe prostration of strength, headache, and a low febrile state of system, together with an inflammatory state of the conjunctiva, thirst, loss of appetite, and heat and dryness of throat, with tightness across the forehead. The great inaptitude for exertion, and general prostration of strength, appeared prominent.

Not only were these two persons thus indisposed. A parrot hung up in the same room also became ill. It manifested thirst and languor, refused its food, and seemed constantly drooping. A while after these unaccountable symptoms made their appearance, or about the time, a friend, who happened to have some knowledge of my own case previously, was solicited, quite accidentally, to admire the paper with which the rooms were just before decorated, and he at once pronounced the paper to be an injurious one. The owner, however, could not believe that there was or could be anything pernicious in the wall-paper, and after enduring the illness for two or three weeks, resolved to leave home for the benefit of his health. He went off to Ramsgate for a change, where he stayed a week, and returned home in perfect health. His wife remained at home, and got no better.

It is remarkable that in two days, as I am assured by the gentleman himself, he became as ill as ever, and then first began to dawn the conviction that the observation about the wall-paper was founded in fact. This conviction soon gained ground by the very force of circumstances. It was indeed a conviction truly forced upon him directly against his will, and became seriously earnest, as he had by this time got really alarmed for his own and his wife's welfare. Having borne these distressing symptoms for several weeks, they at last determined to have the whole of this new paper removed from both their rooms, and I am assured that they recovered their health in less than a week afterwards.

While it appears so difficult to convince many persons speculatively of the fact of the pernicious agencies of this arsenical wall-paper, it is very remarkable that in the case of this gentleman, who was so disinclined to believe, the conviction which he has derived practically is deeply rooted, and seems to have been ratified by the very force of his suffering. (a)

While, probably, very few persons would predicate such effects as have been detailed, from the papers decorating their rooms, I have reason to believe that a vast deal of slow poisoning is going on in Great Britain from this cause, these injurious results being never traced to their true source.

It remains to say a few words on the *modus operandi* of the diffusion of the poisonous agent. Writing exclusively to communicate the facts to the Profession, I did not on the former occasion think it necessary to give any detailed explanation, inasmuch as the scientific members of the Profession were as well able as myself, if not indeed more so, to fill in these minor particulars for themselves. There can be no doubt that arsenical vapours, whether pure or in certain combinations, inhaled in respiration, get readily into the blood, and are capable of producing all the constitutional effects which are the result of absorption of arsenic from the alimentary canal. Diarrhoea is not so usually a symptom in these cases, it at present appears, as when arsenic has been taken into the stomach; and that is just what we might presume would be the case as to the early periods at least, or in cases of slow poisoning through the medium of respiration, inasmuch as the irritant is not primarily in contact with the alimentary canal. On the other hand, we have the well-marked signs of a severe local irritant in other parts, just

such as the arsenical dust would be expected to produce, namely, irritation of the air passages, the nasal passages, the conjunctivæ, the mucous membrane of the throat, and of the frontal sinuses, yielding the severe frontal pain and tightness, the hot and dry state of the posterior nares and throat, and the epiphora.

That the water-colour pigment forming the patterns upon a wall paper is constantly yielding dust to the atmosphere of a room can admit no question. A puff of wind or an ordinary current of air floats off myriads of particles, especially during the process of drying, either when the paper is new, or whenever dampness from the weather may have subsequently affected the paper and its colour. In some papers which I have examined there seems an almost entire absence of tenacity, as if the pigment were stuck on with water merely. A dry napkin just rubbed lightly over the green patterns will exhibit abundance of the colour-dust, and even where the gummy or glutinous constituent of the colouring agent be in sufficient quantity, there is no doubt that the patterns still lose gradually their tenacity to some considerable extent, and especially by alterations in the hygrometric state of the atmosphere.

It may have been known, possibly, to others in this country; but until after my attention was directed to this subject in my own case, I was not aware that this very matter is taken cognizance of by the Prussian sanitary police. In an instructive periodical work, I have lately met with some observations on this subject by Dr. Scoffern, and I give the following very interesting passage:—

Dr. Scoffern observes, "As you intend to reside some considerable time in the Prussian dominions, you will, perhaps, set about papering your rooms. Take care in doing this you do not give the police cause to pounce down upon you. What evil can there be, you will, perhaps, say, in the papering of a room? Learn, then, for your instruction, that the Prussian police are, amongst other things, sanitary officers. Each nest or squad of them,—excuse the German names,—has its own *Polizei Physicus*, or Police Sanitary Physician, whose duty it is to see that nothing be done to the prejudice of the laws of public health. An Englishman whom I knew took it into his head to hang his sitting-room with paper of a certain green tint. To be in a chamber whilst the paper-hanging operation is going on, is not agreeable. The Englishman absented himself, until the time when he thought the hanging would be complete. He then came back, and was surprised to find the chamber, not merely hung, but unhung. The police had sent people there to strip the paper off. The green pigment, which the Englishman had so much admired, was a preparation of arsenic, Scheele's green; and for this reason it was considered to imperil the public health. A rather far-fetched notion was this; but I know the event to be true."

In a note to the above, the writer remarks, "Whilst the above was still in type, uncorrected, a fact has transpired proving that the Prussian sanitary officers were right, and that my surmise of the idea being far-fetched, was wrong. A medical gentleman of Birmingham writes to the editor of a journal to state that he had suffered from sitting in a room papered with arsenical green hangings. The heat of a gas-flame evaporated the pigment, and filled the room with deleterious fumes."

In my former communication I alluded to two characters by which the arsenical green paper could be recognised—at least, by a practised eye;—namely, the elegant brightness of the pigment, and the imperfect way in which it usually adheres to the paper when closely examined, showing a little "running," as if put on a somewhat greasy surface. It is proper, however, to mention, that in many of these arsenical papers which have come under my observation neither of these characters is very evident, the two characteristics relating to the colour only in its purity. I often see these papers, with the natural tint of Scheele's green made lighter by means of mixing a little whiting or some such substance, in order to contrast with a very dark green flock, which forms portions of the pattern or ground, and this modification of the colour appears to make the arsenical green "take" more kindly to the surface of the paper.

It is unquestionable, that while in England we enjoy so much liberty of action and such an extent of self-government, we, on the other hand, lose much in some respects in a sanitary or hygienic sense by that same freedom from interference, and that by no means seldom, to the detriment of the public health; for it too often happens, that vested interests and

(a) I may mention, that a portion of the wall-paper above alluded to is in my possession; that it is a "flock" paper, with a profuse pattern of a light and elegant green on a flock ground, and that on analysis it yields abundance of arsenic.

local ignorance or prejudice carry the day against practical intelligence and those precautions for the public good which a wise humanity and the most evident responsibilities earnestly and plainly recommend.

The Government of this kingdom have onerous responsibilities to encounter, with all the obstacles which a free country can supply from the popular voice, whether high or low, but no rational man can for one moment doubt that that same Government are most anxious, as far as they can, to suppress any proceedings really injurious to the public health and safety. Ere long, let us hope that the facility with which Her Majesty's lieges can procure arsenic and other dangerous poisons for the destruction of themselves and others will be removed, and that they will not stop here, while any of us may be unconsciously poisoned in our very food and delicacies, and even by our own firesides.

I am, etc.

W. HINDS, M.D.

Birmingham, May 18, 1857.

MEDICAL CONFRATERNITY IN DUBLIN.

[To the Editor of the Medical Times and Gazette.]

SIR,—It is to be desired that a better understanding existed among members of the various branches of the Medical Profession in seeking or accepting official situations, so as to exhibit to the public a greater amount of independence and self-respect than can be boasted of at present. Such a code of ethics would compel a more just and fair remuneration than is now, in almost any instance, granted to Medical Officers of public institutions. Some well-regulated combination should exist, calculated to influence official governors, and force them to a proper remuneration, as we cannot make them reflect how unreasonable and unjust it is to require duties the most arduous and laborious, and at times, during epidemics, exposing the ill-paid and hard-worked officer and his family to the most calamitous consequences, for a pittance such as would not be accepted by a tradesman. No consideration ever appears to be given to the large outlay a Medical man's education requires to qualify for even the lowest grade of it, nor the many years expended in acquiring knowledge subsequently.

I am induced to take up this subject from my attention having been called to a correspondence read at a late meeting of the Irish Medical Association, where my name has been introduced in the following matter:—

I had been the ordinary Medical attendant (Mr. M. Collis is the consulting Surgeon), and supplied medicine to an Institution near Dublin called the Santry Training School, under the management of a body of long standing called the "Incorporated Society for Promoting English Protestant Schools in Ireland." The distance from town is nearly five miles; some of the duties were performed by me nearly fifty years ago; the date of my own appointment is now about thirty-five years back. Latterly, from the large increase in the establishment, (to an hundred and odd persons, including domestics), my duties became very arduous, and as the governors in their prospectus bound themselves to supply medical attendance, I was placed in a delicate situation, lest apparent neglect of any kind might be made a ground of complaint on the part of the parents or friends of the boys.

I received thirty guineas a year, but owing to the frequent outbreaks of epidemic disease, my duty became still more onerous, and obliged me to make application in January, 1856, to the Society, for a moderate increase of salary.

In that memorial I stated "that in the year 1854 I had to pay ninety-nine visits, at a distance of above four miles. The medicine supplied was at an average cost of about £10; that of car-hire above £18. In the last year the medicine may be said to have amounted to about the same sum, but I was obliged to visit 149 times, car-hire nearly £28. Thus leaving as the remuneration in 1854, for 99 visits, the sum of £2 18s. 9d., but in 1855, I was out of pocket £6 18s. 9d."

In reply I received the following:—"Resolved, that while the Board appreciate the long and efficient services of Doctor Nicholls, they cannot, in the discharge of their trust, grant him any increased remuneration, his salary being considerably more than the amount of that of the highest payment made to any other Medical Officer under the Society."

After a short period I resigned, and I may remark that during the few days which elapsed from the time of my resignation until my successor commenced duty, an outbreak of

measles took place, which obliged me to visit so frequently, as to expend on car-hire a sum considerably more than the balance of my salary.

It is not for me to say, whether the parties who bequeathed the estates to these several institutions left a schedule defining the cost of Medical attendance; but the answer of the Board was, I thought, inconsistent and unreasonable, inasmuch as I had recently witnessed a very large outlay at the Institution on ill-assorted buildings, such as a tower and a Gothic decorated examination-hall, both unnecessarily costly and ornamental, and affording no benefit to the establishment, while there was a manifest neglect of improvements of a useful kind, such as the erection of water-closets, and a more perfect draining and sewerage of the whole concern.

Since my resignation, now little more than a year, I have had no less than three successors, each, I understand, retiring on the ground taken by myself, of hard duty and little pay. The first gentleman, a Fellow of the College of Surgeons, in stating to the Association his reason for retiring from office, reflects on one of his successors for having accepted it; and here I cannot avoid alluding to the hardship of his case, for though a member of a higher grade of the Profession than I have the honour to be, he was not thought worthy even of the small stipend I had, but was given a salary of only £20 a year.

I learn from the correspondence that the place was next filled by a gentleman who is a Fellow of the College of Physicians, but how long he retained it I cannot tell.

My third successor is a Fellow of the College of Surgeons, and it appears to have been his acceptance of the office that has called for the correspondence to which I have alluded, and in which the author (my immediate successor) complains of the hardship to which he was subjected, and remarks that "It is a great pity, to say the least of it, that any Medical man should be found to undertake a post at a sum which a Professional brother refused to do it for. Is not this the reason that boards of guardians, commissions, all kinds of boards, in fact, the public at large, treat us so badly and grind us to the lowest penny? for they know well that if I, or any other, think we are badly paid and resign a post, they will easily get another to step into our shoes. It is no wonder, when we have so little *esprit de corps*, that we are walked over by others. Here is a situation that three Medical men have resigned for being badly paid, and you undertake it."

In the opinions expressed in the foregoing quotation from the letter of my first to my third successor and present occupant of this lucrative post I fully concur. I only wish that it had been acted upon, so far as I am concerned; for had my immediate successor, who complained so bitterly of one of his successors, waited upon me, I should, with great pleasure, have informed him of the cause of my retirement, and showed him it was impossible to fulfil the duties of the situation at a reduced salary, either in justice to himself, his profession, or the parties he proposed to serve.

For myself I will say that, whatever I may have felt, the thought never entered my mind of bringing this business before the Profession until I read the letters in the Dublin Medical press.

I am, &c.

49, Dawson-street, Dublin.

JOHN NICHOLLS.

THE ROYAL MEDICAL BENEVOLENT COLLEGE.

[To the Editor of the Medical Times and Gazette.]

SIR,—Having been present at the late annual meeting of the Royal Medical Benevolent College, I take the liberty to inform you that the report of the meeting furnished by you, and published in your last number, is more "harmonious" (?) than strictly correct.

The courteous adoption of an amendment proposed by those who have been designated "dissentient governors," and the cordial reception of that courtesy by the latter, must not be interpreted as implying the removal of all grounds of complaint; on the contrary, these still exist. Endeavours are at this moment being made to negotiate with the Council for a return to the original intentions of the College.

I doubt not but that it is the determination of the so-called "dissentients" steadily to pursue, by all legal means, the objects they have announced to the Council. "Harmony" will not—cannot—be restored until a permanent reduction of

the charge for the education of exhibitors, to the maximum of thirty pounds per annum, shall have been secured by the laws of the College. I am, &c.

Upper Holloway, May 20, 1857.

W. P. KESTIVEN.

THE LATE DR. SCOTT.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the obituary notice of that accomplished Surgeon, Dr. Scott, of Portsmouth, mention is made of the numerous and successful operations which he had performed. Reference is made to laryngotomy and tracheotomy; but it is not stated in that notice, nor is it generally known, that he was one of the very few Surgeons who had successfully accomplished the operation of œsophagotomy. Such, however, is the fact; and within a very short period of Dr. Scott's death, I had a long and interesting conversation with him, wherein he minutely detailed the particulars of the case and the steps of the operation. I strongly urged him to publish this very important case; and it is to be hoped that some notes of it may have been left which will be available for the purpose of laying before the Profession the details of what I know to be one of the most remarkable and successful surgical operations which have ever been undertaken. I am, &c.

HENRY SMITH.

Caroline-street, Bedford-square.

A CIVIL SERVICE MEDICAL DEPARTMENT.

[To the Editor of the Medical Times and Gazette.]

SIR,—The Government has decided upon abolishing the General Board of Health as a separate and independent department of the public service, and a Bill is at this moment before Parliament, having for its object to transfer the duties hitherto performed by the Board, to the supervision of a department of the Privy Council. Would it not be, therefore, well to inquire at this particular juncture, whether the interests of the Profession, and those of the public at large, would not be best promoted by the formation of a new department of the public service, to be entitled "The Civil Service Medical Department," for the regulation, supervision, and appointment of Medical officers in all those branches of the public service at present held by Medical men, upon some uniform system as respects their duties and emoluments?

The numerous, diversified, and all-important public services rendered by the Medical Profession in every part of the kingdom; the extensive use made of their scientific and special acquirements; and the vast aid and cordial co-operation which its members have at all times afforded in carrying out any scheme for the promotion of health or for combating disease, have rendered a continuance of those services a public necessity, and in every respect deserving of a state recognition.

"A Civil Service Medical Department" for regulating and securing efficiency in the Medical officers attending the poor and the police; in those appointed to gaols, prisons, and reformatories; to public lunatic asylums; to national schools and free emigrant ships; to the public offices; and to public works and establishments; and probably, hereafter, to free hospitals and dispensaries; could not fail to prove of great public utility, if conducted with ordinary care and prudence.

The service should embrace preventive as well as curative medicine, by paid officers of various grades of rank, acting under a code of rules and regulations uniform in character for the whole kingdom, and devoting their whole time to the public service. It should also be responsible for the due and efficient performance of the duties to one properly constituted authority, and the pay and retiring allowance should be fixed by Act of Parliament, as in the case of the army and navy.

I am desirous of submitting these views for consideration, as I believe them calculated to promote feelings of independence and self-respect among the members of the Medical profession, by having their public services duly recognised and appreciated, and because I am fully persuaded that the public interests would be promoted by their being carried into effect. The money expended under the present system, although it amounts to a good round sum, would require to be considerably augmented to carry out this scheme effectually; and there may be some difficulty in inducing some parties to forego the patronage they enjoy at present: but these are difficulties

of detail that would be disposed of in due time, and which, I doubt not, would speedily vanish under a free and candid ventilation of the subject. I am, &c.

JAMES BIRD.

8, Seymour-street West, Connaught-square,
May 12, 1857.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, May 5.

Dr. WATSON, President, in the chair.

Mr. BRYANT exhibited a

MYELOID TUMOUR OF THE CONDYLES OF THE FEMUR.

Joseph Skinner, aged 15, a gas-fitter residing at Wandsworth, was admitted into Guy's Hospital, under Mr. Hilton, on April 8. He had always enjoyed good health till the end of December last, when, without any known cause, his left knee began to swell, but was unattended with pain. The enlargement gradually increased, and stiffness of the joint appeared, with some degree of pain on pressure. He continued, however, at his work till three weeks ago, when by Medical advice he rested, applied blisters, and took cod-liver oil. The growth then became stationary, and he applied for admission into Guy's. When admitted he presented a delicate aspect, but his body was well nourished. In the situation of the condyles of the left femur and extending upwards, there was a swelling of a firm, even, and tense character, which apparently consisted of dilated bone. The skin was free and not discoloured, but considerable pain was experienced when pressure was applied. The joint was easily movable, and was evidently unaffected. A few days after admission the growth was punctured with a trocar and canula, but blood only escaped. On April 28 the thigh was amputated above its middle. On examining the growth, its character became apparent. It had evidently commenced in the lower part of the shaft of the femur, which it had expanded, some part of the shell of bone being now visible; it had encroached partially upon the epiphysis, which was slightly diseased at the line of junction. Some new bone was also visible at the part where it was connected with the shaft. To the eye the tumour presented the usual features of that recently recognised growth, the myeloid tumour; it was, perhaps, unusually vascular, the cells being nearly filled with blood. Microscopically also it exhibited the large, many-nucleated cells described as characteristic of the myeloid growth.

Mr. BRYANT also exhibited a

PENDULOUS FIBRO-NUCLEATED TUMOUR DEVELOPED IN THE SKIN OF THE ABDOMEN.

Jane R., aged 30, a married woman residing in Bermondsey, was admitted into Guy's Hospital on April 22, under the care of Mr. Cock. Three months previously she received a blow upon the right side of the umbilicus; a few days afterwards she discovered a tumour in this position about the size of a walnut. This gradually enlarging, she came to Guy's. On admission she presented a healthy appearance, and on the right abdominal walls was a tumour the size of a fist, easily movable, and raised from the muscles beneath; its surface presented a congested appearance, and to the hand it gave a firm and fibrous feel. On May 5 it was excised. Under the microscope, it was composed of little else than nuclei, with some delicate fibre tissue, evidently belonging to that rare class of tumours called fibro-nucleated.

Mr. SQUIRE presented a specimen of

TRUE ANEURISM OF THE LEFT POSTERIOR CEREBRAL ARTERY.

The tumour was of considerable size, measuring four inches in circumference, and weighing half an ounce (avoird.); it proceeded from the vessel close to its origin from the basilar artery, and occupied the space in front of the pons varoli, and between the crura cerebri, pushing up the floor of the third ventricle, and encroaching on the left thalamus. The patient was a female over forty years of age, having children (with

whom she was found in an incapable state), and was under observation only a few hours before death from adynamic fever or destitution; she was not comatose, there was no paralysis of sphincters of either of the extremities, or of the facial muscles; the senses of seeing and hearing existed and the power of deglutition. Mr. Squire called attention to the absence of atheroma of the coats of the arteries, to the remarkable diminution in the size of the basilar artery, and to the free anastomosis existing, both the anterior and posterior communicating arteries being accompanied by two and three parallel vessels nearly approaching the usual size of those vessels (as shown in the preparation), while other smaller ones could be traced in the dissection: the interior of the tumour was occupied by concentric layers of yellowish, dense fibrin, the centre being a soft dark coagulum at the base of the tumour, extending three-quarters of an inch forwards from the very small cavity continuous with the vessel from which the tumour arose.

Dr. OGIER WARD showed a specimen of

ATELECTASIS PULMONUM, WITH ENLARGED THYMUS GLAND.

The child was born after about four hours' strong labour, the last pain rupturing the membranes and expelling the infant with great force. Though premature (seventh month), it cried strongly; but the breathing through the nostrils seemed impeded by mucus, and was not improved when this was removed, but gradually became more slow and feeble, till death occurred in four hours. During this time the child cried at intervals, and the respiration was bronchial, with no vesicular murmur. The chest seemed developed, and the abdomen, which was tympanitic during the cessation of respiration, subsided immediately on its being restored by inflation, or when the cry was excited. The head and face were livid, while the rest of the body was almost of its natural hue; and this distinction remained after death. The heart continued to beat long after the respiration had ceased. *Section cadaveris*—10 p.m.—Head and face congested; belly tympanitic; blood fluid and black; lungs dark, of the colour of liver, sank in water, even after an attempt to inflate them with a blow-pipe, which entirely failed, though it produced slight emphysema of their cellular tissue under the pleura; heart normal in every part. The thymus gland was of a flattened spheroidal form, two inches in diameter by one in thickness, and was probably the cause of death by its pressure on the trachea, though this supposition does not explain why the lungs were not inflated.

ENTOZOON IN THE LUNG OF A SNAKE.

In the absence of Dr. Quain, Dr. SIBBALD showed some specimens of the *Nematoideum natricis*, an entozoon which he had found while assisting Dr. Quain in dissecting the vascular system of the common coluber. The specimens were females with the oviducts full of ova in different stages of development. The works of Helminthologists not having any complete account of the species, Dr. Sibbald had thought it might be interesting to exhibit these entozoa to the Society. Dr. S. also showed some drawings illustrative of the mode of development, and referred to the resemblance which some of the young states bore to the *Trichina spiralis* found in human muscle.

Dr. SIBBALD exhibited a specimen of

MALFORMATION OF THE HEART, WITH ABNORMAL DISTRIBUTION OF AORTIC BRANCHES TO THE LUNGS,

taken from a child, who had been a patient of Dr. Scott Alison, at the Brompton Hospital. The child, which appeared to be healthy at the time of birth, had become emaciated, and died with symptoms of pneumonia at the age of ten months. The cardiac signs before death were:—a loud systolic bruit at the base, and a very distinct thrilling pulsation felt in the supra-sternal notch. The heart is about the size of a large plum, divided into equal parts by the septum ventriculorum, and more egg-shaped than cordate in form. The auricles are nearly normal in size and form. The right ventricle is of full size, and its parietes are about a quarter of an inch in thickness; from it the aorta arises. The left ventricle is about the same size, and its walls are very slightly thicker than those of the left; no vessel arises from it. The septum between the two is incomplete at the upper part, leaving a space through which a large goose quill may be passed. The aurico-ventri-

cular valves are normal. Owing to the opening in the septum, both ventricles communicate with the aorta; and as the pulmonary artery is so much narrowed as to have become, at its origin, practically obliterated, both ventricles must have poured all their blood into the aorta. The aortic valves are two in number,—right and left,—covering their respective ventricles. Between the heart and the origin of the innominate, the aorta is much dilated, so that its diameter is about twice the normal standard. At the origin of the innominate, the aorta assumes its usual size, which it preserves through the rest of its course. It then gives off branches on each side to the lungs. The middle one at the left side communicates with the real pulmonary artery, which latter sends, as normally it ought, a division to each lung receiving blood from the communicating branch just mentioned.

Mr. COOPER FORSTER showed a specimen of

RUPTURED AORTA.

The case had occurred in the practice of Mr. Roper of Shoreditch. S. B., aged 55, on the 14th April, 1857, in the act of crossing a street was knocked down by a cart, and before he could get up an omnibus heavily laden was driven against him. The wheel did not pass over his body, but pressed on him, and pushed him along on the ground three or four yards. He was insensible when extricated from the wheel, and died within five minutes. There was no external injury except a superficial abrasion of the skin two inches above the crest of the right ilium. On post-mortem examination, extravasation of blood to a very large extent was found in the mesentery. On removing the intestines and mass of coagulum, the hæmorrhage was discovered to have proceeded from a transverse rupture in the posterior part of the aorta, about one inch in length, opposite the fourth lumbar vertebræ. Upon slitting open the aorta, another laceration was seen below the former, of about the same extent, but only through the middle and internal coats of the vessel. There were slight atheromatous patches about the seat of laceration. The body of the fourth lumbar vertebræ was transversely fractured. There was very little displacement of bone. The lower end of the fracture projected slightly forward. The two surfaces of bone could be freely moved. No other part of the body had sustained any injury.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 12, 1857.

Sir CHARLES LOCOCK, Bart., President, in the chair.

A PAPER, by Dr. SIEVEKING, was read, on an

ANALYSIS OF FIFTY-TWO CASES OF EPILEPSY OBSERVED BY THE AUTHOR.

The 52 cases analysed had occurred exclusively under the author's own observation, and the conclusions were limited to points with reference to which satisfactory evidence could be obtained.

Sex.—24 were females, 46.15 per cent; 28 were males, 53.84 per cent.

Age.—The following is the distribution of the cases throughout the different periods of life: Under 10 years, 17; from 10 to 20, 19; 20 to 30, 4; 30 to 40, 4; 40 to 50, 7; over 50, 1; or from infancy to the age of 20 years inclusive, 69.23 per cent.; from 21 to 40 years inclusive, 15.38 per cent.; from 41 to 55 years inclusive, 15.38 per cent. Arranged according to sex, we find during the first decennium, 8 males and 9 females; during the second, 12 males and 7 females; during the third, 2 males and 2 females; during the fourth, the same number of each; during the fifth, 2 males and 3 females; during the sixth, 1 female. The male sex during puberty, therefore, seems to exhibit a more marked proclivity to epilepsy than the female; at later periods the ratio returns to the equality shown to prevail during the first ten years of life.

Causes.—Hereditary tendency could be traced only in 6 cases, or 11.1 per cent. A definite cause was assigned by the patient or the patient's friends in 16 cases, or nearly one-third of the whole. Among these, otorrhœa is mentioned twice; fright twice; injury to the head, twice. The cases differ in the relation they bear to the occurrence of the seizure.

Premonitory symptoms.—The occurrence of an "aura" is a

point on which observers have expressed different opinions. Comprising under this term all the premonitory symptoms indicating the approach of a fit, it is noted in 27 out of 52 cases; the most common was a sense of giddiness and impairment of vision; sometimes the patient suffered pain in a definite region of the body, or, though unable to explain the sensation, is aware of some change, from which they know that a paroxysm is about to take place. The sensation was never described as a puff of wind or aura in its verbal sense.

Individual Symptoms.—Headache is a very frequent concomitant of epilepsy. It was observed in 33 out of 52 cases, or 63.42 per cent. The mode of its occurrence varies; the patient either suffers habitually or very frequently from it, and the symptom bears no immediate relation to the paroxysm; or the headache occurs shortly before the fits, so as to usher them in; or again, it affects the individual after they are over. It was constant or frequent in 36.5 per cent.; it occurred before the fits only in 7.7 per cent.; it occurred after the fits only in 17.3 per cent. Biting the tongue is justly regarded as an important corroborative symptom; but it is by no means uniformly present, nor does it constantly occur in the different paroxysms affecting the same individual. The tongue was bitten in 17 cases, or 32.7 per cent. The urine was tested for albumen in 19 cases, and it was found temporarily present in one, permanently in one. It was also tested for sugar in 14 cases, and this ingredient was not found once—a result which seems irreconcilable with the observations of Dr. Goolden.

Results of Treatment.—The author ventured to express a feeling of scepticism with regard to the positive certainty of any cure of epilepsy. He believed that, in the majority, no organic lesion, in the ordinary anatomical sense of the word, was present in the commencement of the disease, and that, in a large number, none seems to result from the recurrence of the fits. It appears that a diathesis is necessary to its occurrence, and that this may be suppressed or held in check; but whether it may be eradicated is a question which he would not venture to answer in the affirmative. He was satisfied of the power of well-selected remedies in repressing, and often indefinitely postponing, the paroxysm, and he particularly insisted on the importance of dietetic and regimenal treatment. The number of apparent cures was 15, or 28.85 per cent.; in other instances, more or less benefit was obtained. The duration of the disease before treatment is commenced, has an obvious influence over its curability. Eight of the 15 (apparent) cures were wrought in cases that had lasted one year or under, four were of two years' duration, one of three, one of six, and one of eight years. The treatment adopted had varied with the nature of the constitutional affection in each case; but he was able to draw this general inference, that the main indications which should guide us, are to remove local irritation by counter-irritants, to promote the healthy action of the secretory organs, and to give a tone to the constitution by vegetable and metallic roborants. The author expressed his belief that there was no specific for epilepsy; the salts of zinc certainly fail to remove it in many cases.

In a postscript he detailed the results of an analysis of the Returns of the Registrar-General with reference to sex in deaths from epilepsy during seven years; which gave 6729 males, and 6149 females, or 52.26 of the one sex to 47.73 of the other.

Dr. WEBSTER observed that epilepsy was upon the increase in this country, many more persons dying of it now than formerly. In London the deaths were at the present time double the number of those twelve years ago. Hence it was of the utmost importance to ascertain whether the disease could be cured, and if so, by what means. In the populous towns in Scotland the disease was not one-third so fatal as in England. The frequency and fatality of the disease increased in going south, while insanity prevailed most in the north, being more common in Scotland than in England. Males, on the whole, were more frequently attacked with epilepsy than females. In early life the preponderance was in the female sex; in middle age the disease was about equally divided, and in advanced life it attacked males much more frequently than females. Fright was a very common cause of epilepsy, especially in young and hysterical females. One of the worst cases he had seen was that of a young female who was frightened by seeing a "ghost,"—a young man dressed up in a white sheet. He had recently heard of a young lady who was seized with an epileptic fit from paying a visit to the

Chamber of Horrors at Madame Tussaud's wax exhibition. Later in life drunkenness and dissipated habits were a frequent cause of epilepsy. The disease, he believed, was more hereditary than Dr. Sieveking's tables would seem to indicate. From the observations of Esquirol and others, and from his own investigations, he believed that a third of the cases might be traced to hereditary tendency. In a report of the New York Asylum it was stated that all the cases of epilepsy admitted during the year were traced to hereditary influence, or to drunkenness in the parents. It was only in the early period of life that he thought treatment would prove beneficial. Much had been said of late about various minerals for the cure of the disease, but it was now admitted that they had only a temporary reputation, and were no better than the other proposed remedies. Regulation of the diet was of the greatest importance in the treatment. He remembered a case in which the patient ate a hearty supper of bacon, eggs, and greens, which brought on an epileptic attack in the night, and resulted in death within two days. Mental excitement was a not unfrequent cause of attack. In the epileptic department of the Salpêtrière he (Dr. Webster) conversed with a celebrated Italian cantatrice, who became so excited at hearing him speak in her native tongue about her native place, that she was attacked with a severe fit.

Dr. A. P. STEWART said he had had several severe cases of epilepsy that had been associated with diseased kidney. He should have been glad to hear further details of the method of treatment adopted and recommended by the author. He had tried all the minerals said to be serviceable, but without the slightest appreciable benefit, indeed, in some cases with an aggravation of the symptoms. After trying almost everything, in despair, he had recourse to the plan recommended by Dr. Hunt, of Brook-street, in the *Medical Times and Gazette*, the use of nitro-muriatic acid internally and externally; and in one case of long standing he found great benefit from the treatment, and was trying it in another.

Dr. SNOW said, he had a preparation of volatile hydrocarbon, given him by Mr. De la Rue, which, when given to animals, produced fits of epilepsy. They walked about quite conscious till the moment of the attack, when they became insensible, and remained so during the fit, but recovered when removed from the vapour. Mice, if not removed, died from the effects of the vapour in about half a minute. White mice turned blue and livid before the fit commenced.

The PRESIDENT said the author had omitted to mention one or two causes which were frequently productive of epilepsy. The first was dentition. Though he did not consider Dr. Ashburner quite justified in carrying his ideas so far as to extract teeth for the cure of epilepsy, he had seen many cases in which, after certain overcrowded teeth had been removed, the epileptic patient had never experienced another attack, though he might have previously had three or four in a day. Every one, moreover, was familiar with the number of instances of infantile epilepsy from dentition. Another very fruitful cause was sexual indulgence, and especially onanism, to which he believed might be attributed the greater frequency of the disease of late years. There was a form of epilepsy to which special notice had not been drawn, and which he had been in the habit of regarding as hysterical epilepsy. It was confined to women, and observed a regularity of return connected with the menstruation. It was as baffling a form of epilepsy as any other. The paroxysms only occurred (except in the case of great mental excitement) at the menstrual period. Having been often baffled in those cases, of which he had seen a considerable number, he had been led within the last twelve months to try a remedy, which had so far answered his expectation that he thought it desirable that it should have a larger trial, by being made known to a larger number of persons. Some years ago he chanced to see a paragraph in the *British and Foreign Medical Review*, giving an account of some experiments that a German had been making with bromide of potassium. He found that by taking ten-grain doses three times a day for about a fortnight he became impotent, but upon leaving off the medicine his powers returned; he tried a similar experiment with others, and a similar result was produced. He (the President) accordingly thought he would try bromide of potassium in many hysterical cases that he met with unconnected with epilepsy, in which there was a great deal of sexual excitement and disturbance, attended with various distressing symptoms difficult to manage; and he found that from five to ten grains

given three times a day had the effect of calming the excitement to a very marked degree. About fourteen months ago he was applied to by the parents of a lady who had had hysterical epilepsy for nine years, and had tried all the remedies that could be thought of by various Medical men (himself among the number) without effect. She began to take the bromide of potassium last March twelvemonth, having just passed one of her menstrual periods, in which she had had two attacks. She took ten grains three times a day for three months; then the same doses for a fortnight previous to each menstrual period; and for the last three or four months she had taken them for only a week before menstruation. The result had been that she had not had another attack during the whole of the period. He had tried the remedy in fourteen or fifteen cases, and it had only failed in one, and in that one the patient had fits not only at the times of menstruation, but also in the intervals. In answer to Dr. Webster, the President stated that the patients whom he had treated with bromide of potassium were all under the age of thirty.

Dr. SIEVEKING said he had only alluded to the causes of epilepsy which had come under his own observation, or which had been assigned by the patients themselves, in the cases which he had detailed; but he had no doubt of the frequent operation of the causes referred to by the President.

Mr. CURLING communicated a paper by Mr. Giles,

ON THE TREATMENT OF WOUNDS OF THE PALMAR ARCHES BY FORCED FLEXION OF THE ARM.

After allusion to the various troublesome complications and frequent very serious consequences which attend wounds of the palm, when circumstances prevent the application of ligatures at the seat of injury, the author remarked upon the advantages of a method of treatment which should have the advantage of checking the hæmorrhage without either severe local pressure or ligature of vessels remote from the wound; such advantages would seem to be afforded by the plan of flexing the forearm upon the arm with sufficient force to arrest the bleeding, and maintaining it in that position so long as may be necessary. The author related five cases of wound of the palmar arch, and one of wound of the forearm, which were thus treated, and all with success, save one, in which, however, the procedure was not had recourse to until a month after the accident. The merit of originating this mode of treatment was given to M. Durwell, by whom it was proposed in *L'Union Médicale*, tome iii. p. 341.

Mr. SPENCER WELLS said he had been trying the experiment alluded to in the paper, but had been unable to stop the pulse in either of his own arms by the most powerful flexion.

Mr. ARNOTT said, the cases to which the author referred were very troublesome, the various modes of applying ligatures would not always succeed, and in such cases the plan recommended would prove a valuable adjunct, but it ought not to be depended upon alone. The object was (as in the treatment of aneurism by pressure) not to interrupt the circulation altogether, but to diminish its force.

Mr. CURLING said, he could stop the circulation of his own radial artery with ease by forcible flexion. The plan recommended would not answer in all cases, but in very many it might prove of great service to the Surgeon. In a case lately in the London Hospital one of his colleagues had thought it necessary to tie the brachial artery.

A paper, by Dr. J. H. BENNETT, was then read, on

ANTEFLEXION OF THE UTERUS CONSIDERED AS A NORMAL ANATOMICAL CONDITION.

The author's attention was attracted some years ago, during a series of investigations into the condition of the os internum during life, by the anatomical fact that the uterine cavities and the uterus itself, in women who have never borne children, are generally more or less anteflexed. He thinks it proved that this was misunderstood because stem-pessaries are invariably made perfectly straight, and anteflexion has been universally described as an abnormal or morbid condition. M. Huguier, however, published a memoir some years ago, describing anteflexion as an occasional congenital condition, but he described it as accidental and exceptional. The author's researches were begun with a view to determining the value of contraction of the os internum as a cause of sterility. He found that when the uterine sound met with resistance there, a small wax bougie could be passed, which, if allowed to

remain for a minute or two in the uterus of a woman who had borne no children, presented when withdrawn a slight anterior curve. The same effect continues in some degree after one or more parturitions. This state can scarcely be recognised by digital examination under ordinary circumstances, but is readily perceived when decided, and may become very great in exceptional cases. The author then adverted to the observations of M. Boullard on this subject, who describes anteflexion as the natural anatomical direction of the uterus. He finds it most marked in the fœtus, less so in the child, and least in the adult; and that it ceases to be perceptible in most women who have borne children. The author thought that M. Boullard had rather exaggerated the degree of curvature. He next pointed out the pathological bearing of anteflexion, believing that it might be treated as a morbid state, especially if the uterus be enlarged by chronic inflammation, which would render the curvature more marked. He thought attempts to straighten the uterus likely to be injurious, and that no treatment ought to be employed except what might be necessary to relieve the congestion of the organ. He did not think it had any definite relation to irregular menstruation, but when both conditions were coincident the general health was much below par, and the anteflexion was commonly very decided.

Mr. J. WOOD thought the cases referred to depended upon the degree of fulness or emptiness of the bladder and rectum. He had seen the peculiarity in question in the fœtus and in very young persons, but at such periods there appeared to be less curvature than in after-life. He did not consider the curve a permanent one, but one which depended upon the varying conditions of the pelvic organs.

UNIVERSITY OF ST. ANDREWS.

MEDICAL EXAMINATION PAPERS, MAY, 1857.

FIRST EXAMINATION.

FIRST PART.

Translation of a Latin paragraph into English.

Give the derivation and primary meaning of the following words:—Oxygen, chlorine, iodine, aphonia, stethoscope, hæmoptysis, rhinoplastic, and cathartic.

SECOND PART.

Chemistry.

1. Enumerate the compounds which oxygen forms with nitrogen, stating what they are, and writing their formulæ.
2. Give the processes for the formation of sulphuric, muriatic, and nitric acids.
3. State the principal tests for arsenious acid in solution; also for the salts of lead in solution. What are the antidotes for the latter, and for corrosive sublimate?

Materia Medica.

4. What are the pharmacopœial preparations of mercury that are used internally? State their uses and average doses.
5. What are the principal uses and proper (average) doses of the following preparations?—
1. Gallic acid. 2. Tincture of aconite. 3. Solution of arsenite of potash. 4. Extract of belladonna. 5. Tincture of cantharides. 6. Acetic extract of meadow saffron.
6. Write a Latin prescription (without using abbreviations or symbols) for an aperient draught; and give directions that it should be taken the first thing in the morning, and that the dose should be repeated every third day.

SECOND EXAMINATION.

Anatomy and Physiology.

1. Sketch briefly the distinctive characteristics of man.
2. What is the average quantity of food required for the maintenance of the human body in health? Give diet-scales respectively suited for men in regular active exercise and for the inmates of workhouses, with reasons for your selection. What are the principal arguments for and against the moderate use of alcoholic drinks?
3. Give a sketch of the ordinary and minute anatomy of the salivary glands, and state what you know regarding the chemistry and functions of their secretions.
4. Describe the anatomy of the shoulder-joint, and give the attachments of the muscles by which it is strengthened.
5. What are the effects of continuously respiring a vitiated atmosphere? What is the average mortality in Great Britain,

or any part of it? How far is it supposed it might be decreased by sanitary improvement?

THIRD EXAMINATION.

N.B.—In answering the practical questions the Examiners require every candidate to specify the mode of treatment he is in the habit of adopting, and the doses of the medicines which he prescribes.

Pathology and Practice of Physic.

1. Describe the principal modes in which the blood is altered in disease.

2. Explain how diseased conditions of the heart, liver, and kidneys may produce dropsy. How would you treat the dropsy arising from these different causes?

3. Describe the symptoms and treatment of delirium tremens. How may it be distinguished from acute inflammation of the brain?

4. How would you distinguish between carcinoma and chronic ulceration of the stomach? In what different modes may the latter prove fatal? Give a sketch of the treatment you would adopt in these diseases.

5. Describe an ordinary case of continued fever, terminating in recovery. State how you would treat such a case. What are the arguments for and against special fever wards in hospitals?

FOURTH EXAMINATION.

Surgery.

1. Describe the mode of performing the operation of lithotomy, and give its advantages and disadvantages as compared with lithotripsy.

2. What are the symptoms and the diagnostic marks of the different kinds of iritis, and what the treatment proper for each?

3. State the causes, symptoms, progress, and treatment of cancer oris.

Midwifery.

4. Describe the structure of the placenta, and its relation to the uterus and its vessels.

5. Give the symptoms and treatment of puerperal peritonitis, as distinguished from puerperal fever.

6. What is trismus nascentium? State its causes, its symptoms, and the morbid appearances after death.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS, FRIDAY, MAY 15.

THE MEDICAL PROFESSION.

Lord ELCHO moved for leave to introduce a Bill to alter and amend the laws regulating the medical profession. After what had passed yesterday he would make no remarks on the details of the measure. He wished the House to understand, however, that the Bill was not his own, but was one which had been referred to a select committee in 1856, had been amended by that committee, and by them reported almost unanimously to the House. He wished to bring it in solely that the House might judge between it and the Bill of the hon. and learned member for Newcastle (Mr. Headlam).

The motion was agreed to, and the Bill was afterwards brought up and read a first time.

THE CATTLE MURRAIN.

Lord NAAS asked the Vice-President of the Board of Trade whether Her Majesty's Government had received any communications relative to the murrain said to be raging among the cattle on the continent; and whether he would lay such communications on the table of the House?

Mr. LOWE said, he had no objection to lay the communications which had been received on this subject on the table, but a report which had been made by Dr. Greenhough, under the directions of the Board of Trade, would in the course of a day or two be laid on the table; and as it would contain all the interesting information contained in those communications, perhaps the noble lord would wait until he saw the report. If, however, on seeing it, the noble lord was not satisfied, there would be no objection to the production of the original documents.

MONDAY, MAY 18.

LUNATIC ASYLUMS (IRELAND).

Mr. BEAMISH asked the Attorney-General for Ireland when the report of the Commissioners appointed to inquire into

the expenditure upon the lunatic asylums, Ireland, might be expected to be laid upon the table of the House?

Mr. FITZGERALD said, that from the quantity of business which yet remained to be done in regard to this commission there was no reasonable prospect of obtaining the report in time for any useful purpose this session.

TUESDAY, MAY 19.

DISEASES OF THE ARMY IN THE CRIMEA.

On the motion of Mr. BAXTER, a copy was ordered of the report on the pathology of the diseases of the army in the East, by Dr. Aitken and Dr. Lyons.

CONTAGIOUS DISEASES IN SHEEP AND CATTLE.

On the motion of Mr. BENTINCK, leave was given to bring in a Bill to amend an Act passed in the session 11th and 12th Victoria, chap. 107; also to amend an Act passed in the session 16th and 17th Victoria, chap. 62; also to amend an Act passed in the session 19th and 20th Victoria, chap. 101, entitled, "An Act to continue certain Acts to prevent the spreading of contagious or infectious disorders among sheep, cattle, and other animals."

The Bill was subsequently brought in and read a first time.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 15th inst. :—

CHIPP, JOHN, Shrewsbury.

EICHLER, CHARLES FERD., Sydney, New South Wales.

GRIFFITHS, RICHARD, Machynlleth, Montgomeryshire.

KEAL, JOHN THOMAS, Oakham, Rutland.

KELLY, CHARLES, Ramsay, Isle of Man.

M'INTYRE, JAMES, Coleraine, County Derry.

MUSKETT, JOSEPH JAMES, Holt, Norfolk.

PRICE, WILLIAM PRESTON, Margate.

RAYNER, THOMAS, Birstal, near Leeds.

WILKINSON, JOHN SEBASTIAN, Caledonian-road, Islington.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, 14th May, 1857.

ASSLIN, WILLIAM JOHN, Army.

CHAMBERLAINE, JOSEPH RICHARD, Wolverhampton.

COX, HENRY, London.

FITZGERALD, CHARLES EGERTON.

HICKS, CHARLES CYRIL, Toddington, Beds.

HOPSON, STEPHEN MOULTON, Tittleshall, Norfolk.

STORRS, ROBERT, York.

SPOFFORTH, WILLIAM FAIRFAX, Lichfield.

WILLIAMS, CHARLES, Dolgelly, North Wales.

DEATHS.

DOWLING.—At Mountmelliek, on the 12th instant, after a long illness, Dr. Dowling, aged 50.

STEWART.—At his residence, Belfast, Dr. Horatio Stewart, Professor of Materia Medica in Queen's College, in the 37th year of his age. Dr. Stewart graduated at Glasgow in 1839, and took a diploma in Surgery from the Royal College of Dublin in 1840. His death, in the prime of manhood, and in the midst of his usefulness, will be severely felt in Belfast.

TUCKER.—On the 10th instant, at Edinburgh, Samuel Reeve Tucker, Esq., Assistant-Surgeon to the 7th Regiment of Bengal Irregular Cavalry.

APPOINTMENTS.

MR. BRYANT has been appointed Assistant-Surgeon to Guy's Hospital, in the room of Mr. Calloway.

T. B. KENDERDINE, Esq., M.R.C.S., L.S.A., formerly House-Surgeon to the Dispensary, Macclesfield; now at Whangarie, New Zealand, has been appointed a District Coroner of that colony.

DR. LEARED has been appointed Physician, Dr. Lawrence, Oculist, and Messrs. Gay, Statham, and Savory, Surgeons to the Great Northern Hospital.

MIDDLESEX HOSPITAL.—On the 18th inst., the 112th anniversary festival of this charity was celebrated at the Albion Tavern, Mr. Hugh Adair, M.P., in the chair. The chairman made an appropriate and most forcible appeal on behalf of the charity. During the past year the number of medical in-patients had been 941; surgical ditto, 748; and admissions of accidents, 579—making a total of 2,268. The number of out-patients for the same period had been 16,844, giving a grand total of 19,112 persons relieved or cured during 1856. The income from all sources during the past 12 months was scarcely enough to meet half the calls upon the charity, and the expenditure account consequently showed an excess over receipts of £4,893. The chairman's appeal was promptly responded to, a liberal subscription of £1,500 being announced as received during the course of the evening, of which sum £100 was the gift of her Majesty, and £100 from the President, the Duke of Northumberland.

THE BROMPTON CONSUMPTION HOSPITAL.—The anniversary dinner of this Institution was given on Wednesday at Willis's Rooms, St. James's. Lord Stanley, M.P., was in the Chair. The Chairman gave the toast, "Prosperity to the Brompton Hospital." In proposing this toast the noble lord stated that of 45,000 deaths which occurred yearly in the metropolitan districts, 5600 were caused by consumption; thus, excluding infantine mortality, about one-fifth of the deaths arose from this disease. Since the establishment of this Hospital it had relieved 5586 in-patients and 36,030 out-patients; its income had in one year amounted to £19,000, but had averaged between £7000 and £8000. During the evening subscriptions were announced amounting to upwards of £1000, the noble Chairman giving 20 guineas, and the Earl of Derby 30 guineas.

MR. BLANDFORD, who has been killed in the streets of Naples by robbers, had been attached to the Medical Staff stationed at Malta during the Crimean war.

THE ROYAL MATERNITY CHARITY.—The centenary anniversary festival of the Royal Maternity Charity was celebrated on Wednesday evening by a banquet at the London Tavern. The Duke of Argyll, K.T., took the chair. The noble chairman, in advocating the claims of the charity to public support, dwelt upon its perfect organization, and expatiated in the warmest terms upon its merits and usefulness. The appeal of the noble Duke was responded to by a subscription of £550, including a donation of £50 from the Queen.

VACANT CHAIRS.—The Chair of *Materia Medica* is now vacant in two of the Queen's Colleges in Ireland; in Belfast by the death of Professor Stewart, and in Cork by the election of Dr. Alexander Fleming, the late Professor, as Physician to the Queen's Hospital, and Joint Professor of *Materia Medica* in Queen's College, Birmingham, in the room of the late Dr. George Fife, who had resigned these appointments shortly before his death.

CONCOURS D'AGRÉGATION.—As the result of the concours opened at Paris, January 2, and just terminated, the following gentlemen were chosen to fill the nine places of *agrégés*, or assistant professors:—*Section of Medicine*—MM. Chauffard, Hérard, Axenfeld, and Empis. *Section of Surgery*—MM. Duchaussoy, Fano, Trélat, and Foucher. *Section of Midwifery*—M. H. Blot.

PRIZE QUESTION FOR 1858.—The Belgian *Académie des Sciences* proposes the following subject for 1858:—"A comparative examination of the organs destined for reproduction in the Cryptogamia and Phanerogamia, exhibiting the analogies and differences which these organs present in these two orders of plants." The prize is a gold medal, 600 francs in value. The essays to be written, in French, Latin, or Flemish, are to be addressed post free to M. Quetelet, Secretary, prior to the 20th September, 1858.

KING'S COLLEGE, LONDON.—**MEDICAL DEPARTMENT**, Easter, 1857.—*Scholarships*—Senior Scholar: William Spencer Watson. Second Year Scholar: John Harley. Junior Scholars: George James Symes Saunders, Robert Batho, Edward Sharp. Warneford Scholars, Class II.: Alfred Fleischmann, John Leigh, Arthur Ernest Sansom.

PRIZES AND CERTIFICATES OF HONOUR, WINTER SESSION, 1856-7.—*Divinity*—Prizes: Richard Hughes, 3rd year; Edmund Symes Thompson, 2nd year; Edward Sharp, 1st year.

Warneford Endowment—1st Prize: Alfred Fleischmann; 2nd Prize: Edmund Symes Thompson.

Leathes' Endowment—1st Prize: Arthur Ernest Sansom.

Gill Prize—Peter Downs.

Anatomy—Prize: John Easton. Certificates of Honour: 2nd year—William Cayley, George Frederick Atehley, Edmund Sykes Thompson; 1st year—Frank Pout, William Workman, George Moule Evans.

Physiology—Prize: John Easton. Certificates of Honour: 2nd year—Edmund Symes Thompson, George Frederick Atehley, Arthur Ernest Sansom, James Horton; 1st year—William Workman, George Moule Evans.

Chemistry—Prize: John Easton. Certificates of Honour: 2nd year—George Frederick Atehley, William Cayley, Arthur Ernest Sansom; 1st year—George Moule Evans, Francis Blake Hutchinson.

Medicine—Prize: Morris Tonge. Certificate of Honour: John Temperley Gray.

Surgery—Prize: Francis Mason. Certificates of Honour: William Paul Swain, Ebenezer Toller, James Horton.

Clinical Surgery—Prize: Edwin Edmund Day. Certificate of Honour: William Paul Swain.

Clinical Medicine—Prize: Morris Tonge. Certificate of Honour: Samuel Craddock.

Medical Society's Prize—Alfred Meadows.

SUMMER SESSION, 1855-6.—*Practical Chemistry*—Prize: Arthur Ernest Sansom. Certificates of Honour: Morris Tonge, Edward Evan Meeres.

Forensic Medicine—Prize: John Aleoek.

Botany—Prize: John Harley. Certificates of Honour: Edmund Symes Thompson, James Wyard Gooch.

Midwifery—Prize: John Temperley Gray. Certificates of Honour: John Harley and Edmund Symes Thompson, *et.*, Thomas Cayzer.

Materia Medica—Prize: John Harley. Certificates of Honour: Robert Charles Brown and John Easton, *e.g.*, Benjamin Evans.

Comparative Anatomy—Prize: James Keess. Certificate of Honour: John Earle.

Clinical Medicine—Prize: William Steer Riding. Certificate of Honour: Alfred Meadows.

Clinical Surgery—Prize: John Way.

NAMES OF THOSE ELECTED ASSOCIATES OF KING'S COLLEGE, LONDON:—Edwin Edmund Day, Wharton Peter Hood, William Liddon, Alfred Meadows, William Steer Riding, George Stratton Symmons, Thomas Pridgin Teale, William Spenceer Watson.

ELECTION OF HONORARY MEDICAL OFFICERS TO PUBLIC CHARITIES.—A special meeting of the members of the Liverpool Medical Institution was held on Wednesday, May 6th, to take into consideration a letter from the Committee of the Southern Hospital, requesting the opinion of the members as to whether the adoption of the plan of election without canvassing, recommended by them, and carried into effect at the last election of surgeons to that hospital, had given satisfaction or otherwise, and whether they would recommend the same plan to be adopted at a future election. The chair was taken by Dr. Cameron. It was proposed by Mr. Desmond, and seconded by Dr. Nevins, that it be resolved,—That the members of this Institution return their most cordial thanks to the Committee and Trustees of the Southern Hospital, for the courtesy and readiness with which they have acceded to their recommendation as to the method of conducting elections of honorary medical officers, as well as for their letter inquiring the opinion of the members as to the result of the adoption of that recommendation at the last election. It is a matter of great satisfaction to the members of the Medical Institution that the change in the mode of election has been adopted. They trust that the example thus set may be followed by the other charities in this town; and they hope that the Trustees of the Southern Hospital will persevere in the course already entered upon, with such modifications and alterations as may from experience appear to them desirable.—Carried *nem con.* It was proposed by Dr. Whittle, and seconded by Dr. Vose.—"That a suggestion be made to the Committee of the Southern Hospital, that in future elections, candidates should not be allowed to circulate copies of Testimonials." After a discussion, in which considerable difference of opinion was expressed as to the advisability of such a restriction, an amendment was proposed by Dr. Macintyre, seconded by Dr. Hibbert Taylor, "That the consideration of this and other matters of detail be postponed for future discussion."—The amendment was carried. It was moved by Mr. Waters, seconded by Mr. Higgin-

son, "That the secretary be requested to send a report of the proceedings of this meeting to the medical and local papers."—Carried unanimously. A vote of thanks to the chairman was carried unanimously.

PARISIAN MILK.—The Paris *Moniteur* contains a number of convictions of milk-dealers in Paris, for selling milk reduced in strength by water. Jean Antoine Blangen, milkman, is condemned, for knowingly selling watered milk, to twenty days' imprisonment and 50 fr. fine. Marie Louise Rochette, (wife of Galbert) has ten days' imprisonment and 50 fr. penalty, and so on. The name of the offender and his punishment is published in his parish church.

YELLOW FEVER AT RIO.—A yellow fever hospital has been established at Rio de Janeiro at the expense of the Brazilian Government, for the sailors of all nations that are struck with the fever while lying in Rio harbour. Every day a small steamer goes round to the ships in harbour and takes out those with fever, in order that they may be carried to the hospital. Medical men are always in attendance on them. At Bahia the captains of nine French vessels died from fever.

AN EARTHQUAKE IN THE EAST.—"A violent shock of earthquake," says a letter from Erzeroum, of the 28th ult., in the *Presse d'Orient*, "was felt two days ago in the neighbourhood of Mouch. The oscillations continued at intervals for 36 hours. Several villages in the Plain of Bolanek were destroyed, and nearly 180 persons lost their lives."

FIREPROOF GARMENTS FOR FIREMEN.—Some curious experiments have just taken place at Paris to test a new contrivance for protecting firemen from the action of the flames, and enabling them to resist a strong heat. It consists of gloves made of amianthus, a kind of filamentous mineral, a helmet of the same material fitting into another of wire gauze, and a shield one metre in length, and 80 centimetres broad, besides other garments of the above-mentioned materials.

SMALLPOX AND VACCINATION.—The Vaccine Board report to the Home Secretary of State that, during the past year, 210,942 charges of lymph have been supplied, and that 141,147 persons have been reported to them as vaccinated, besides 7,039 vaccinated at the stations of the establishment. The increasing demands for lymph from Ireland are highly satisfactory, as proving that the poorer classes of the Irish are rising superior to the ignorance and prejudice which formerly hindered the acceptance of vaccination. The transmission of lymph to Ceylon in hermetically sealed glass tubes has proved very successful, and with the lymph so sent 23,353 persons have been vaccinated. The Board adduce statistics to disprove a popular but very erroneous notion, that small-pox is tending towards extinction, and they very seriously deprecate announcements of such a tendency as calculated to lead to the neglect of vaccination. It has been demonstrated, on the contrary, that this loathsome and disgusting disease is as virulent as ever—that is, the mortality in those who take small-pox "naturally," or without being vaccinated, is quite as great as ever it was. The mortality in this class is one-third of those attacked, or 35 per cent.; under 5 years of age, it is 50 per cent.; and under 2 years, much greater. It is least between 10 and 15 years, and after 20 years of age it rises rapidly, and at 30 exceeds the mortality of infancy. After 60 years of age there is hardly any escape. This last fact is worthy of notice as refuting another vulgar error—viz., that in later periods of life infectious diseases are not so easily taken—this is only partially the case. There are instances of small-pox after 60, and sexagenarian patients almost invariably succumb. The efficacy of vaccination, if proof were wanting, is established by some very striking statistical statements. During the epidemic of 1825 the mortality was 28.0 per cent.; it has now fallen to 15.0. No nurse or servant in the Small-pox Hospital has taken the disease for the last 20 years, all being vaccinated on entering the hospital. Certain valuable cautions are supplied to the public by the board. The lymph should always be procured direct from the National Vaccine Establishment, and the operation should be conducted with great care. Great attention must be paid to the cicatrices left. Three or more punctures should be made (with a clean lancet) of a valvular character, opening upwards so as to retain the inserted lymph, and the good marks or cicatrices left should approach a circular form, be distinct, and foveated or honey-combed, dotted or indented, in some instances radiated, and have a well-defined edge or margin. Vaccination properly

performed, the board declare once more to be an all but complete protection from one of the direst scourges of suffering humanity.

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 16, 1857.

BIRTHS.

Births of Boys, 873; Girls, 809; Total, 1682.

Average of 10 corresponding weeks, 1847-56, 1523.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	514	536	1050
Average of the ten years 1847-56 ... ..	...	...	1046
Average corrected to increased population	...	...	1151
Corrected average for corresponding week in ten years 1847-56	542.2	503.4	1045.6
Deaths of people above 90 ... ..	...	...	6
Deaths in 13 General Hospitals	30	28	58

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population. 1851.	Small-pox.	Measles.	Scarlatina	Hoop- ing-Cough.	Dia- rrhoea.	Ty- phus.
West	376,427	..	3	4	7	2	7
North....	490,396	1	8	2	7	3	7
Central ..	393,256	1	8	2	8	5	3
East ...	485,522	..	5	6	15	3	12
South	616,635	..	5	..	14	5	10
Total..	2,362,236	2	29	14	51	18	39

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29.808 in.
Mean temperature	57.6
Highest point of thermometer	80.2
Lowest point of thermometer	39.1
Mean dew-point temperature	49.9
General direction of wind	Variable.
Whole amount of rain in the week	0.08
Amount of horizontal movement of air in the week	400 miles.

DEATHS REGISTERED DURING THE WEEK.

CAUSES OF DEATH.	In the Week ending Saturday, May 16, 1857.						Averages of Temperature and Deaths in 10 Weeks.
	Deaths of Persons.						
	AT ALL AGES.	of Years Age.	under 40 Years of Age.	60 Years of Age.	under 80 Years of Age.	80 Years of Age and Upwards.	
Mean Temperature	57.6						51.9
ALL CAUSES	1050	497	155	167	179	47	1045.6
SPECIFIED CAUSES	1044	496	155	167	179	47	1037.5
DISEASES:—							
1. Zymotic Class	194	148	22	11	10	3	224.1
2. Dropsy, Cancer, and others of uncertain seat	54	8	8	20	14	4	44.2
3. Tubercular Class	212	86	79	37	10	..	203.6
4. Of Brain, Nerves, etc. ..	105	45	7	24	28	1	117.5
5. Of Heart, etc.	47	8	4	19	15	1	39.4
6. Of Respiratory Organs ..	202	104	10	32	50	6	166.5
7. Of Digestive Organs	49	23	8	11	7	..	65.8
8. Of Kidneys, etc.	14	1	4	4	4	1	11.7
9. Of Uterus; viz. — Puer- peral Disease, etc.	7	1	6	..	..	..	8.8
10. Of Joints, Bones; viz.— Rheumatism, etc.	4	..	1	1	2	..	8.1
11. Of Skin, etc.	3	1	1	1	..	..	1.8
12. Malformations	2	2	..	..	..	..	3.7
13. Debility from Premature Birth, etc.	22	22	..	..	..	..	27.0
14. Atrophy	41	26	2	2	9	2	26.6
15. Age	55	..	..	..	26	29	41.6
16. Sudden	2	1	1	..	..	..	10.7
17. Violence, Privation, etc..	31	20	2	5	4	..	36.4
CAUSES NOT SPECIFIED.. ..	6	1	..	..	..	..	8.1

BOOKS RECEIVED.

- First Annual Report of the Medical Officers of Health of St. Pancras, Middlesex. By E. Hillier, M.D. London. 1857.
- Muspratt's Chemistry. Part XXXI. Glasgow. 1857.
- Facts relating to Hospital Nurses. By J. F. South. London. 1857.
- Des Métastases. Par J. D. Tholozau, M.D. Paris. 1857.
- Essays from the Edinburgh and Quarterly Reviews. By Sir John F. W. Herschel, Bart., K.H. London. 1857.
- A Catechism of the Medicine and Surgery of the Eye and Ear. By T. Wharton Jones, F.R.S. London. 1857.
- On the Prevention and Treatment of the Sheffield Grinder's Disease. By J. C. Hall, M.D. London. 1857.
- L'Art Dentaire. No. IV. Paris. 1857.
- The Midland Quarterly Journal of the Medical Sciences. Vol. I. Part I. Birmingham. 1857.
- Letters and Papers on the Recent Dental Movement. By J. C. Clendon. London. 1857.
- On the Cure of Stammering. By James Hunt, Ph.D. Third Edition. London. 1857.
- Notices sur Hyères and Cannes. Par Edwin Lee, M.D. Paris. 1857.
- Memorials of Andrew Cross. London. 1857.
- Paralysis and Neuralgia. By H. Tweedy, M.D. Dublin. 1857.
- Report of the Scottish Lunacy Commission, and Appendix. Edinburgh. 1857.
- Sixth Annual Report of the Wilts County Lunatic Asylum. Devizes. 1857.

TO CORRESPONDENTS.

A Druggist.—Hydrosulphuric acid is synonymous with sulphuretted hydrogen. Its acid powers are very feeble in comparison with the mineral acids, but it combines with alkalies and metallic oxides, forming metallic sulphurets.

Medico-Chirurgus.—We believe that the attempt to explore the Fallopian tubes through the uterus has been abandoned.

Q. E. D.—The Chelsea Garden was bequeathed as a Physic Garden to the Society of Apothecaries by Sir Hans Sloane, but the land belongs to the family of the Earl of Cadogan, the Society having only a contingent and not an absolute interest in the property.

R. U. S.—The only remedy for the evils under which the Poor-law Medical officers suffer, is to be found in association for purposes of mutual protection. You cannot do better than join the movement under the auspices of Mr. Griffin.

Mr. J. F. Hartley.—The principle involved in photography is the blackening of certain salts of silver by the rays of the sun. A bright sunshine is not absolutely necessary, as the diffused light of day is sufficient to produce the effect.

ADVERTISING AURISTS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Your amusing notice of the proceedings of Mr. Colston, the pretended curer of all diseases of the ear, reminds me of some very similar conduct on the part of Mr. Hoghton, who practises in the same department. A lady, a patient of mine, had long suffered from deafness, which had resisted all remedies, and in my opinion, and in that of some of the best authorities on ear-diseases, was beyond the reach of art. She was, however, persuaded by some female friend to send an answer to a printed circular of this Mr. Hoghton, and in due course received a reply, in which this person (although he had never seen the patient) at once declared that he would effect a complete cure on the receipt of two guineas. This letter was not lithographed like Mr. Colston's, but was evidently written by a copying clerk, the signature being in a different handwriting from the rest of the letter. The lady accordingly sent the two guineas, and by return of post received a box of medicines, which I examined, and which I found to consist of some ordinary appliances in affections of the ear, such as glycerine, savin-cerate, etc. I at once admit that there did not seem to be anything deleterious in any of the preparations. It is almost unnecessary to add that the lady derived no benefit whatever from the use of the remedies, but she had paid her money, and this was, no doubt, the only object which the self-styled aurist had in view.

I am, &c. MEDICUS.

Paterfamilias.—If pecuniary obstacles do not exist, we should by all means recommend the pupil designed for the Medical Profession to spend one or two years in preliminary study, after leaving school, and before commencing the actual Medical curriculum. Among the most important of these preliminary studies we should rank the German and French languages, Chemistry, and Natural History.

M.D., St. Andrew's.—A degree is not imperative for the licence of the College of Physicians of London, but evidence must be brought of three years' hospital practice, and of an otherwise extended course of Medical education.

The first part of *Dr. Fenwick's* Statistical Inquiry into the Effects of Chloroform, and of *Mr. Teale's* paper on Plastic Operations, shall appear next week, if possible.

Notices of the subjects of papers at the Medical and other Societies for insertion in the list of Appointments of the week, should not arrive at the office later than Wednesday afternoon.

P. B. M.—The nonsensical paragraph about strychnine whisky is not worthy of serious notice.

Erratum.—Dr. Cotton's appointment as Senior Surgeon to the West Norfolk and Lynn Hospital was inserted last week among the deaths by mistake.

A Sufferer.—The chlorate of potash has not been used in such cases. Relief might be obtained at the out-patients' room of any of our Hospitals.

LACTIC ACID VERSUS PEPSINE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—By reference to my former communication it will be plainly seen that Mr. Squire has not in any way answered what is there stated. The question at issue does not relate to dried gastric juice, but to the relative merits of pepsine so called, and lactic acid, as therapeutic agents.

I have already shown, on Mr. Squire's own statement, that the so-called pepsine owes any virtue it is supposed to possess to the lactic acid which is added to it, and not to pepsine *per se*. If Mr. Squire will confine his experiments and observations to the relative merits of pepsine, which he stated to be an element of the gastric juice, and lactic acid a well-known element of the same secretion, some good end may be arrived at. Until then it would be a waste of time to carry on a useless correspondence.

As you have already observed in your note to Mr. Squire's first letter, he is advocating the so-called pepsine *acidulated with lactic acid*.

Many opportunities in hospital and private practice have convinced me of the superior value of lactic acid to the so-called pepsine; and as one fact is worth a thousand assertions I must be guided by the result of my own observation.

I am, &c.

Upper Montagu-street, W., May, 1857.

WILLIAM O'CONNOR, M.D.

Mr. C. S. Jones.—Many thanks.

The cases of Mr. Jones of Jersey shall appear next week.

COMMUNICATIONS have been received from—

Dr. A. TAYLOR; Professor HUXLEY; Mr. TOYNBEE; Mr. TEALE, Leeds; Dr. FENWICK, Newcastle; Mr. HENRY SMITH; Dr. HINDS, Birmingham; Dr. COTTON, Lynn; Dr. WEBB, Winkworth; Dr. THOMSON; Mr. JONES, Jersey; Mr. KESTIVEN; Mr. THISTLETON; Mr. EDWIN LEE; Mr. SCOTT; Mr. HOVELL; MEDICAL OFFICERS AND LECTURERS, ST. MARY'S HOSPITAL; THE LECTURERS, MIDDLESEX HOSPITAL SCHOOL; Mr. JAMES BIRD; Mr. SLOANE; Dr. PRETTY; Mr. BRITTON; Mr. BARLOW; Mr. KEARNS; Mr. C. S. JONES; Mr. J. WILLIAMS; Dr. HENDERSON; Dr. J. HEDGER; Mr. H. AYLES; Dr. J. E. SCOTT; Mr. GREENWOOD; Mr. E. LEECH; Mr. R. G. BURTON; Mr. WEST, Birmingham; Dr. WINTLE; Mr. SHARMAN; Mr. WAY, Bath.

APPOINTMENTS FOR THE WEEK.

23. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; Westminster, 1 p.m.; King's, 2 p.m.; Charing Cross, 1 p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m.: Mr. Gamgee, "On William Harvey and Carlo Ruini—the Blood and its two Circles, the history of their discovery."

ROYAL BOTANIC SOCIETY, 3¼ p.m.

25. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.; Orthopædic Hospital, 3 p.m.

LINNEAN SOCIETY. Anniversary, 1 p.m.; meeting, 8 p.m.

26. Tuesday.

Operations at Guy's, 1 p.m.

MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m.: Dr. Markham's "Case of Disease of the Heart, with extreme dilatation of the Auricles;" Dr. Mackenzie, of Glasgow, "On a Case of Intense Photophobia and Blepharospasm relieved by the Inhalation of Chloroform;" Dr. Edward Smith, "On the Influence of the Labour of the Treadwheel over Respiration and Pulsation."

ZOOLOGICAL SOCIETY, 9 p.m.

ROYAL INSTITUTION, 3 p.m.: Dr. Lacaita, "On Italian Literature—Tasso."

METEOROLOGICAL SOCIETY. Meeting and Anniversary, 7 p.m.

27. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 3 p.m.

28. Thursday.

Operations at St. George's, 1 p.m.; Middlesex, 12½ p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.

ROYAL SOCIETY, 8½ p.m.

ROYAL INSTITUTION, 3 p.m.: Professor J. Tyndall, "On Sound, and some associated Phenomena."

MEDICAL SOCIETY OF LONDON, 8½ p.m.—*Lettsomian Lectures*: Dr. Lankester, "On the Symptoms, Treatment, and Prevention of Worms in the Human Being."

29. Friday.

Operations at the Moorfields Ophthalmic, 10 a.m.; Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8½ p.m.: Professor A. J. Scott, "Physics and Metaphysics."

ETHNOLOGICAL SOCIETY. Anniversary, 8 p.m.

ORIGINAL LECTURES.

A COURSE OF LECTURES

ON THE

NATURE AND TREATMENT
OF THE DISEASES OF THE EAR.

DELIVERED AT

St. Mary's Hospital Medical School.

By JOSEPH TOYNBEE, F.R.S.

Aural Surgeon to St. Mary's Hospital, Lecturer on Aural Surgery at St. Mary's Hospital Medical School, and
Consulting Aural Surgeon to the Asylum for the Deaf and Dumb.

(Reported by JAMES HINTON, Esq.)

LECTURE XIII.

The Mode of applying the Artificial Membrana Tympani.

As in cases of perforation or destruction of the membrana tympani there is so frequently catarrhal inflammation of the mucous membrane of the tympanum, it is obviously important that no foreign substance should be placed in contact with that membrane; and, as there is always a margin of the membrana tympani remaining, the object of the Surgeon should be to keep the artificial membrane external to the latter. After carefully noting the size of the inner extremity of the meatus to which the natural membrana tympani was attached, the operator should then cut the artificial membrane as nearly of the size and shape of the natural one as possible, taking care at the same time to keep the margin quite smooth and regular (a). The patient must then be placed with the head inclined to the opposite shoulder, while a strong light is thrown into the meatus, which if liable to discharge should have been previously syringed. The operator will now take the artificial membrane, and, having moistened it with water, pass it, by means of the silver wire, gently inwards, until it has reached what he considers the natural position. This he will ascertain by the occurrence of a faint bubbling sound, caused by the escape of the slightly compressed air beyond it; he will also feel a slight obstruction offered to its further passage by the remnant of the natural membrane. Should he attempt to pass the artificial membrane beyond this point, the patient will complain of pain, which until then had not been felt. The most certain test, however, of the artificial membrane having been properly placed is the sensation of the patient, who discovers, by the sound of his own voice, or that of the Surgeon, or by the movement of his tongue and lips, that his hearing has been suddenly much improved.

As it will be imagined that great care must be taken to cut the membrane so that it shall fit the inner extremity of the meatus with exactness, since if too large it would cause discomfort, and if too small it would not fulfil its purpose of rendering the tympanum an air-tight cavity. It is not easy, in all cases, to fit the artificial membrane exactly to the inner extremity of the meatus, so as not to allow of any communication between the air in the tympanum and that in the external meatus; this is, however, the object which should always be sought to be attained. At first, the patient should be instructed not to use the artificial membrane for more than two hours daily; and, if he complains of an uncomfortable feeling, one hour, or even half an hour, will be sufficient.

It would, perhaps, be expected that the contact of a foreign body like the artificial membrana tympani with the wall of the external meatus would soon become intolerable; such, however, is not the case; and several patients have left my room without being able to say, from the sensation in the ear, whether any foreign body were there; many have now worn this apparatus daily, during several years, without having suffered the slightest pain. The explanation of this circumstance may be found in the fact that the most sensitive part of the meatus externus is about its centre, the membrane in the immediate vicinity of the membrana tympani not

(a) In cases where only a small border of the natural membrane remains, it is often desirable to cut the artificial membrane of a size larger than the inner extremity of the tube, so that its edge may turn outwards.

being so abundantly supplied with nerves: another explanation is that the circumference of the artificial membrane presses with extreme gentleness against the wall of the meatus.

The results of the application of the artificial organ have been much more satisfactory than I had reason to anticipate. I have already used it beneficially in many hundreds of cases. The substitution of a thin layer of vulcanized india rubber, for so exquisitely delicate a structure as the healthy membrana tympani, would be expected to afford but trifling aid; such, however, is not the case, for among the patients relieved by it most have heard the human voice perfectly across an ordinary sized room, and in one case the voices of boys in the open air were heard at a distance of between one and two fields. Surgeons, who have paid careful attention to diseases of the ear, will not be surprised at the efficient substitute the artificial membrane offers, as they will bring to mind many cases in which the natural organ has been greatly hypertrophied, especially in chronic inflammation of its dermoid layer, with but a very slight diminution of the power of hearing.

The Surgeon having ascertained that the artificial membrane is beneficial to the patient, if no pain is experienced, it may be allowed to remain in the ear for a few hours, and gradually increased to the whole day: it is often desirable that the use of the membrana tympani should be preceded, or accompanied, by vesication over the mastoid process, whereby the thick mucous membrane of the tympanum may be rendered more healthy. In all cases, the artificial membrane should be removed at night, and, when there is any discharge, the ear ought to be syringed each night and morning with tepid water.

CASES.

Deafness for sixteen years, discharge from each ear for six years, aperture in each membrana tympani; power of hearing restored.—Peter Turnbull, aged 43, formerly in the army, from which he was discharged on account of his deafness, was admitted, under my care, at St. Mary's Hospital, on the 12th of January, 1852. He stated that sixteen years ago, without any other assignable cause than a cold, he became slowly dull of hearing, and five or six years since he perceived a discharge from both ears, which has continued up to the present time. The power of hearing has been gradually diminishing, so that, at present, he requires speaking to loud, close to his head. Upon examination, an aperture between one and two lines in diameter was observed in each membrana tympani, and the mucous membrane of the tympanum, which was the source of the discharge, was more thick and red than natural.

The treatment consisted in keeping up counter-irritation over each mastoid process, and in the use of an injection composed of three grains of acetate of zinc to an ounce of water. Under this treatment he somewhat improved, but the hearing still remained so defective that he was precluded from following any avocation. In the commencement of June, I experimented on this patient with the first artificial membrana tympani, composed of vulcanized india rubber, and the good effect was at once decided. When it was placed over the surface of the original membrane, so as wholly to close the orifice, the patient made a movement of his lips, and said, "I hear as differently as possible from what I have done for many years; everything sounds clear!" This patient went away with the artificial membrane in his ear, hearing conversation perfectly. The following morning, he came to my house, saying that he had accidentally moved what I had left in his ear, and that he was "as dull as ever." I replaced the artificial membrane—he again heard well; and being supplied with one which he could introduce or remove at pleasure, he has worn it during the day, ever since—a space of between three and four months—and he has never complained of pain or discomfort from it. Latterly, he has found the hearing so much improved that he has been able to dispense with the use of the artificial membrane for a few hours daily; but he hears much better with than without it. As a proof of the great melioration that has taken place, this patient told me that while in the country lately, and using the membrane, he heard voices at a distance, and upon going towards the place from which they appeared to proceed, he found some boys under a hedge, more than a field distant from the spot where he heard them. He is going back into the army.

This patient was shown at a meeting of the Pathological Society of London, in February, 1853. The following is the

published report:—"The artificial membranes having been removed, the members of the Society had the opportunity of observing the perforate condition of each membrana tympani. After the removal of the membranes, he could not hear, unless loudly spoken to; but, when he had replaced them, which he did with apparent readiness, his hearing was excellent."

Each membrana tympani destroyed by measles at four years of age; hearing restored by the artificial membrane; great sensibility to sounds.—Miss B., aged 21, consulted me on November 9, 1853, on the recommendation of Dr. Grindrod of Seaforth, near Liverpool. Her health was good.

History of case.—At four years of age she suffered from an attack of measles, which was followed by discharge from each ear; this has lasted to the present time, so that the ears require syringing every day. Since the measles, the power of hearing has been so much deteriorated, that it is requisite for her to be spoken to distinctly within the distance of a yard. Upon inspection, it was found that the membrana tympani of each ear had been destroyed, and that the only vestige of it was a very narrow margin. The mucous membrane lining the tympanic cavities was very red, and much thicker than natural; it was covered by a mucous discharge.

Treatment.—An artificial membrana tympani was introduced into each ear, the effect of which was to improve the power of hearing at once, and so greatly, that the patient heard my voice perfectly well across my room, with my back turned towards her. Ordered to wear the artificial membranes during the day, to take them out at night, and to syringe the ears with warm water twice daily. 13th.—Has been wearing the membranes every alternate day, and has heard perfectly while they were worn; indeed, the only drawback to her comfort has been the circumstance that her friends still speak loud to her, which causes considerable uneasiness in the ears from the very great sound. 16.—Continues to hear well, but has been obliged to remove to a quiet street, as the sound of carriages passing through the street has been annoying. She complains of the "intolerable rustling" of her silk dress, of which she was never before conscious. The patient left London after some further watching, hearing quite comfortably. I received a letter from her in December, from which I subjoin an abstract:—"I am thankful to say the improvement in my hearing has increased almost daily, and I now hear general conversation easily, and feel quite a different person from what I did a short time since. I am still sensitive to sounds, but not nearly so much distressed with them as I was at first. I found the noise of the organ at church too great the first time I went, and came out almost as soon as the service commenced. I find no pain in my ears, and am in all respects in the enjoyment of good health."

Deafness of twenty years' duration perfectly relieved by the artificial membrane.—The following particulars of a case, about which we corresponded, were sent to me by Dr. Shearman, of Sheffield:—"I tried the false drum in one ear; the whole of the membrana tympani had been destroyed, and the cavity of the tympanum so bared to the view, that it was difficult at first to ascertain whether the drum membrane had gone, or was obscured by polypoid or other growths; however, the probe came down upon the bone. The false drum gave such relief, that the hearing distance was increased from actual contact to twelve, and subsequently to eighteen inches; the patient is now able to manage the contrivance herself.

"The other membrana tympani of the same patient is yet so covered with polypous growths, that I cannot make out the precise condition of the drum; however, inflation of the tympanum shows that the membrana tympani is perforated. The deafness in this case is of nearly twenty years' duration, is perfectly removed on the left side, and although the whole of the left membrana tympani is destroyed, the false one acts perfectly."

Destruction of each membrana tympani: stricture of the meatus.—Miss S., aged twenty-four, not in very good health, states that at four years of age she suffered from an attack of scarlet fever, subsequent to which she was so hard of hearing, as to require to be spoken to distinctly within the distance of a yard. This hardness of hearing is increased during cold and damp weather; has had discharge from both ears, but at present it is only very slight from the left, which is the better ear; complains of no pain, but of a noise. Lately, from not being in good health, has been more than usually dull.

Examination.—Right ear. The hearing distance of the watch is half an inch. The central part of the meatus is so

contracted that it is not more than half its natural size. By means of a very strong light thrown beyond the contracted portion, a portion of the mucous membrane of the tympanum could be detected; there was no appearance of the membrana tympani.—*Left ear.* Hearing distance one inch; meatus contracted like that of the right ear; the membrana tympani was not seen, but in place of it was observed the shining tympanic mucous membrane.

At first sight it appeared that the presence of the stricture would offer an obstacle to the introduction of the artificial membrane; I nevertheless tried a small one to each ear, passing it through the stricture, and then moving it gently to and fro, so as to allow it to recover its plane surface. Having done this, I moved it slightly inwards to the situation of the natural membrane, and immediately the patient found that she heard perfectly all that was said at any part of the room. There was not much difference between the hearing power of the two ears. Care was required in the management of the case from slight tendency to irritation of the meatus, but the patient left me hearing well. In the middle of February, 1854, the mother of this lady being in London, called to thank me for the benefit produced in her daughter's case. She said that her daughter "continued to hear perfectly, and that she was quite an altered person."

Deafness from scarlet fever during five years. Hearing entirely restored by the use of the artificial membrane.—Miss G., aged 14, was brought to me in August, 1853, by Dr. Grindrod. Health good. *History of case.*—When between 9 and 10 years of age suffered from scarlet fever, since which time has had a discharge from both ears, attended by a diminution of the hearing so as to require to be spoken to loud, near to her. She has lately been to a school at Brussels, where her defective hearing had greatly arrested her progress. Upon inspection, it was found that the membrana tympani in each ear was absent, the mucous membrane of the tympanum was thick and red, and poured out a mucous secretion. An artificial membrana tympani was applied to each ear, and the result was so complete a restoration of the hearing power, that the patient could hear all that was said in different parts of a large room. This patient returned to school at Brussels, and in about six weeks afterwards I received a letter from the father, a Medical man, from which the following is an extract:—"We have had the most pleasing intelligence from my little daughter at Brussels respecting her hearing. I think I cannot do better than give it in her own words—'I have had three German doctors and one French one to see me, or rather the artificial membranes. I am quite a new creature, my hearing is so greatly improved.' The father adds—'This is very satisfactory evidence as to the successful operation of your beautiful invention, after nearly five years' deafness, to an extent that she was unable to hear a word in church the whole of that time.'"

Deafness for twenty years from measles and scarlet fever. Greatly improved by the artificial membrane.—Mr. M., aged twenty-three, consulted me, December 20, 1853. Health good; no relatives deaf.

History of case.—At three years of age, had scarlet fever and measles at the same time, accompanied by much discharge from each ear; was totally deaf for some months after the attack, but slowly improved, so as to hear a loud voice spoken near to the left ear; the right ear nearly useless; lately has heard better at times with left ear for two or three hours. To-day, requires to be spoken to loud within two feet of the left ear, and is about the same as ordinarily. Upon examination of the right ear the meatus was found to contain a collection of mucus and epidermus, which being removed, the membrana tympani was seen to be white, like paper, flat and thick; posterior to the inferior third of the malleus is a small orifice, about three-quarters of a line in diameter, through which mucus oozed from the tympanic cavity. The watch was not heard, even when pressed against the ear; the crack produced by two finger nails was distinguished.

Left ear.—The meatus contained a shready discharge; the membrana tympani was absent; the mucous membrane of the tympanum red and much tumefied. Watch heard when in contact with the ear. Although the hearing power of the left ear was somewhat less than in the majority of cases, where there is an absence of the membrana tympani uncomplicated with any other disease, I nevertheless determined to try the artificial membrana tympani, the effect of which was to

improve the hearing considerably, although not to the same extent as in the majority of cases.

Dec. 21st.—Ordered to wear the membrane for four hours.

22.—Upon the use of the membrane to-day, heard my voice distinctly half across my room.

27.—Says that he never remembers to have heard so well as yesterday; heard everything that was said at dinner, and his own voice was quite distinct; the sound of the rustling of a lady's silk dress quite astonished him; towards the latter part of the day did not hear quite so well; last night, after removing the drum, was exposed to cold, which caused some pain. Without the drum, to-day could not hear my voice, unless I spoke into his left ear; with it, heard much better, but not so well as yesterday; this arose from the mucous membrane of the tympanum being much tumefied. This tumefaction gradually subsided, and this patient left me a few days after, hearing quite well. He inserts the artificial membrane himself, which requires a little careful adjustment. On one occasion, when he started for a walk in the street, after having inserted the membrane, his hearing was far from good, but as he walked on the pavement a sudden movement took place in the ear, and he heard perfectly.

In February, 1854, in a letter, this gentleman says, "I have much pleasure in informing you that the artificial membrane continues to be effectual; my friends are much gratified at the improvement you have been able to effect."

ORIGINAL COMMUNICATIONS.

NEW METHODS OF OPERATING FOR THE CURE OF VAGINAL FISTULÆ.

By J. BART. MINTURN, M.D., of New York.

VAGINAL FISTULÆ are solutions of continuity existing in the walls between the vagina and bladder, urethra or rectum, or between the bladder and uterus, where they lie in contact, forming abnormal openings through which the urine or fæces and flatus escape into the vagina.

The cure of these fistulæ is accomplished by causing a coalescence of their sides. When small, and urethral or rectal, this may be sometimes effected by touching the walls of the aperture with the nitrate of silver or hot iron occasionally repeated. When the fistula is larger its cure can only be accomplished by resorting to operative means, of which the processes are numerous, and the contrivances many and ingenious, a fact which proves the difficulties of the operations, and the unsatisfactory results most often obtained.

I do not now intend to write a treatise upon this most interesting subject, doubly interesting because the unfortunate sufferers are women, and the causes, in the vast majority of cases, that maternal act by which man is born into the world; but will confine myself to the exposition of some new methods of operating, for which I claim the originality either of the process itself, or its application to the treatment of these cases, or both the process and its application, only referring to other methods when they have been adopted, or for the purposes of elucidation or comparison.

In cases of vesico-vaginal fistulæ, the operation is commenced by making an incision of the mucous membrane of the vagina circularly around the fistula, at the distance of three, four, or more lines from its borders, according to the condition and relation of the parts. If the fistula is of small size and recent date, the portion of membrane circumscribed by the incision, may be dissected entirely away, including the borders of the fistula, as recommended by M. Gerdy. The lips of the wound are brought together and retained in contact by means to be considered presently.

But, in a second class of cases, where the abnormal opening is of larger dimension, the borders widely separated, or complicated with loss of substance, great advantage will be derived from having recourse to a species of plastic operation, which consists in making an incision of the mucous membrane, just as described for the first class of cases. The portion of membrane circumscribed by the incision is then to be dissected up from the circumference towards the centre, and left attached at the borders of the fistula for the space of a line or more, according to the vitality of the parts. This flap

should include not only the mucous membrane, but some layers of subjacent tissue, containing vessels necessary for its life and activity.

This flap is next seized with forceps, or the fingers, reversed upon itself, and pushed through the orifice of the fistula into the cavity of the bladder, thus bringing the dissected surfaces of the flap into contact in this new situation. This movement of reversing the flap, and turning it through the orifice of the fistula, may often be facilitated by making a slight incision into the wall of the vagina, around the circumference of the base of the flap.

By means of the dissection and disposition of the flap here described, a much greater extent of surface is obtained, fresh and proper for union by the first intention, than by the ordinary method of pairing the borders of the fistula only, at the same time that the flap acts most advantageously, by filling up the opening of the fistula, thus preventing the liability to the infiltration of urine between the uniting edges, which is known to be one of the most common causes of failure in these operations. There is also secured a uniting base, upon which the vaginal dissected surfaces are brought and retained in contact, thus strengthening the union.

In a third, and extreme class of cases, much additional advantage may be derived by conjoining with the *modus operandi* last described, another species of autoplasty, that by the *Méthode Française*, or sliding, to facilitate the coaptation of the borders of the solution of continuity. It is as follows:—Lines of incision are made from the extreme commissures or angles of the dissection as described above, parallel with each other, in a direction from each side of the fistulous opening for a variable distance, according to the extent of the part to be repaired. Thus if the fistula is longitudinal, the incisions are to be made from the angles aforesaid upon each side of the vagina. If transversal, from the angles towards the vulva and uterus. The sections of vaginal wall contained between the parallel incisions are next to be dissected up, to the depth of two or three lines, in the direction away from the fistula, and left attached, to be brought together and united over the middle line of the opening, by being slid upon the surfaces from whence they were dissected.

In cases where the fistula is transversal, of large size, and situated near the neck of the uterus, another advantage will be derived by employing this process upon the vaginal wall anterior to the fistula, in connexion with the plan proposed and successfully practised by M. Jobert (de Lamballe), (a) which consists in a semicircular incision, practised transversely upon the vagina at its insertion at the neck of the uterus, and by a careful dissection made from before, backwards, through its attachment, not fearing to divide some of the superficial fibres of the neck, separate the bladder from its attachment to the uterus, and cause the upper front portion of the vagina to descend from its attachment at the neck towards the vulva.

This accomplished, considerable space is gained, and the opening of the fistula much diminished. According to the case, according to the position and disposition of the fistula, and the variable necessities of the operation, it may be found expedient or necessary to draw the neck of the uterus towards the vulva. This traction ought to be made gradually by the aid of strong double-hooked forceps, and in general the neck ought to be seized in a direction opposed to the great diameter of the fistula, that is to say, from right to left, if the fistula is longitudinal, from before and behind, if it is transversal. This proceeding has for its object to render more free the action of the operator upon the borders of the fistula. In all cases the points of implantation of the hooks ought to be made in such a manner as to bring to view the anterior and lateral insertion of the vagina and neck of the uterus.

In cases of urethro and recto-vaginal fistulæ, requiring an operation for their cure, the same incisions and dissections as described for the different class of vesico-vaginal fistulæ are to be practised, according to the extent and condition of the abnormal opening. In urethro-vaginal fistulæ the borders of the dissection or flaps, as the case may require, are to be brought together, and united over a catheter previously introduced into the bladder, and worn until the cure is effected, that the continuity of the urinary canal may be established.

Vesico-utero-vaginal Fistulæ.—In cases where the uterus has been perforated at a point corresponding to the bladder,

(a) Jobert, *Traité de Chirurgie Plastique*, tome ii. p. 442.

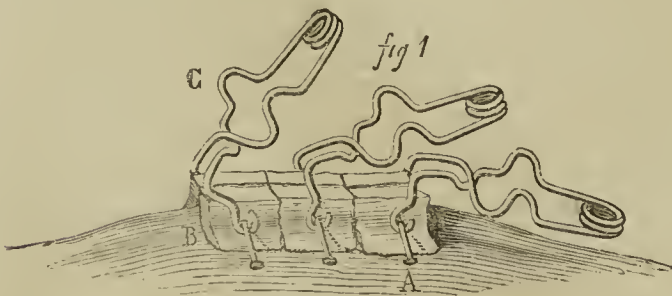
and this organ opened into, the urine escapes through the vesico-uterine fistula which results, and the operation is commenced by making a semicircular incision transversely upon the anterior part of the uterine neck, at the line of junction between it and the vagina, and carrying the dissection carefully from before backwards over the neck, keeping the edge of the bistoury turned towards it, or using the handle of a scalpel, that the bladder may not be wounded; the track of the fistula is crossed, and the bladder, displaced from its attachment to the uterine neck, and made to descend with the vagina towards the vulva; thus bringing the fistula on the vesicular wall into view in the vagina, where it may be operated upon, and treated as a simple vesico-vaginal fistula, the fundus of the organ coming at the same time in contact with, and forming adhesions over the fistulous orifice in the uterine neck.

Although M. Jobert (de Lamballe) first proposed and employs this dissection in cases of large, transverse, vesico-vaginal fistulæ situated near the neck of the uterus, to render the separation of the lips of the fistula less considerable, and to facilitate and strengthen their union by removing all tension from the parts, as was fully described when treating of that class of fistulæ; and to quote the language of at least two Surgeons, and authors of celebrity, Vidal (de cassis), and Sédillot, who, when they have described it, say, in almost the same words,—“*La nouvelle operation est une vraie conquête chirurgicale; elle rend un service immense aux malheureuses femmes affectées de fistule vesico-vaginale, M. Jobert a fait tout ce qui était possible; il n'a pas pu faire l'impossible.*” But I cannot find any account of him having employed it in any other class of cases, or for any different purpose than that here described, it having never occurred to the learned Professor to employ it for the cure of the class of cases now under consideration, for which it is so eminently applicable, and from which so great advantage may be derived, as converting a hitherto intractable, because inaccessible fistula, into one of a simple character within the reach of surgical treatment.

During the performance of these operations, great benefit will be derived from injections into the vagina of cold water, iced water if it is convenient, to cleanse the parts from the blood, and constrict the bleeding capillaries upon the dissected surfaces, and care should be taken that all hæmorrhage has ceased, and the surfaces of the wound be cleansed before the edges are brought together for union.

The loss of blood in these cases, though never great, and usually small, is yet sufficient to materially obstruct the view, and render these operations more difficult and tedious than they would be in almost any other situation. If means could be devised by which these operations could be performed without hæmorrhage, and the results be equally good, or better than by the ordinary methods of dissection, then another “true Surgical conquest” would be gained. To accomplish this much-to-be-desired object, I have proposed to several Surgeons, and discussed freely with my friends, the use of the actual cautery in cases of small and moderately-sized fistulæ, the removal of the destroyed membrane around, and the indurated portions at the orifice, when they have become loosened, the coaptation of the edges of the resulting wound as if it had been made by the knife, and retain them in contact until union takes place, which I do not think would be prolonged much, if any, beyond the ordinary period required.

Having proposed this method and advocated it for more than a month past, I was a little surprised upon taking up



the *Medical Times and Gazette* of the 11th inst., to learn that Dr. Beck had made an application of the principle, and effected a cure upon a case under his care in the Samaritan Hospital,

without the credit being given to the originator, as it has appeared to me that I am, from the result of my agitation of the subject here. That notice has determined me to send you at once this official edition of “novel plans” for publication, that the credit of them, be it valuable or not, may be secured where it properly belongs. Dr. Beck should have applied the Serre fines upon the pins which he used, then the ease would have been complete. The closing link in the chain has been for some reason left out; can an explanation be given? (a)

The next step of the operation consists in introducing pins (Fig. 1 A.) across the lips of the wound, entering upon the vaginal mucous membrane, two, three, or more lines from the edge of the dissection, and coming out at corresponding points upon the opposite side, free of the mucous membrane of the neighbouring organs, bladder and rectum. These pins, before their introduction, have a little square piece of cork (B) placed upon them by the side of the head. After having introduced the requisite number of pins at the distance from each other of about one-third of an inch, another little square piece of cork is passed upon each of the points to oppose the one which occupies the side of the head. This done, we proceed to the application of the serre-fines of Vidal (de cassis), modified and made applicable to these operations, which M. Charrière, sen., has had made after my design (C).

These serre-fines are of large dimension, and the branches made to form almost a right angle with the body and terminate at their extremity in a blunt hook, turned towards the body of the instrument. The branches of the serre-fines are made to embrace the lips of the wound previously approached by means of forceps, and rest upon the pieces of cork; at the same time the hooks are made to embrace the extremities of the pins, which serve to sustain them firmly in position.

The heads of the pins are next made to approach the hooks, and the projecting points opposite are cut off to prevent their wounding the neighbouring parts. By the pressure made by the hooks and branches of the serre-fines upon the pieces of cork, we obtain a regular and nearly uniform pressure upon the whole surface of the wound, and consequently the conditions for union are incomparably superior to those which are offered by the simple thread suture. Another advantage this method has over the ordinary suture, will be evident as soon as mentioned. The amount of irritation and inflammation excited in the parts by the presence of the thread or tape suture often destroy the conditions necessary for union by the first intension, and endangers the life of the patient. The amount of swelling which results causes the sutures to sink deeply into the tissues, destroying the parts underneath them by strangulation, or ulcerating their way out, before the adhesive conditions can be re-established. But it will be at once perceived from the analogy of their action in other parts, that the presence of the pins does not act injuriously against their establishment, whilst the serre-fines, accommodating themselves to the conditions of the contained lips, will expand in a hyperæmic condition of the parts, and contract again as that condition subsides, sustaining a continued and even lateral pressure upon a large extent of surface, which renders unnecessary the parallel lateral incisions usually practised for the purpose of relieving tension when the simple sutures are employed, or the division of the sphincter ani muscle, as is recommended in operations for the cure of recto-vaginal fistula.

This new suture method possesses all the advantages of the twisted and quilled sutures in an eminent degree, without their inconveniences; and more, those last are nearly inapplicable in the vagina, for it would be extremely difficult to apply them in a depth often so great, and in a space so narrow, which has led to the abandonment of the process of M. Roux. But on the contrary, one of the advantages of this means of constriction is the facility with which it can be applied and removed, either with the fingers, a dressing forceps, or a forceps *ad hoc*.

Moreover, by the use of the pieces of cork and serre-fines, we obtain the great advantage of distributing more equally

(a) We have published Dr. Minturn's reclamation, but can state that Dr. Beck had not only spoken of the combination of the cautery and suture for more than a month before he practised it, but that he had seen some *serre-fines* made by M. Charrière for Mr. Spencer Wells last September on a similar principle to those used by Dr. Minturn, yet he preferred the common harelip pin and twisted suture he had seen Mr. Wells apply in another case of vesico-vaginal fistula a few days before. Dr. Beck's patient was completely cured, and we do not see how the case could have been more complete.—ED.

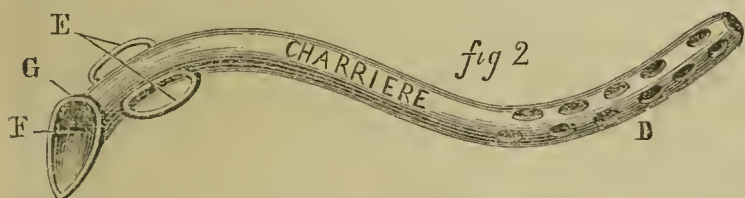
the lateral pressure than can be obtained by either the twisted or quilled sutures, and the further advantage, as before stated, of adjusting pressure, which no other suture possesses.

Dr. Sims, of New York, has reported great success following the employment of his "clamp suture" (b); and I would be the last to detract from his well-earned and deserved reputation; but, while treating of facts, I must state that the same objections weigh against it as against the varieties before-mentioned, though in different degrees in some respects. The difficulties attending its application to the different forms and extent of fistulæ are very apparent, and must often be serious, if not insurmountable. Whenever its application has been attempted by others besides the inventor, the result has been, in the majority of cases, as far as my knowledge extends, either a failure to apply it properly or to effect a cure, which proves the necessity for some method more simple and easily applied, to be found, I think, in the *modus operandi* here described, and this new suture method.

In fact, it is applicable, not only to vaginal fistulæ, but can be employed with advantage upon the majority of wounds requiring sutures, especially in those cases where there is much traction upon the parts, and union by the first intention anxiously desired.

It will, certainly, be a great resource in ruptures of the perinæum following accouchements, etc. In recto-vesical fistulæ, resulting from wounds or following the operation of lithotomy, the same *modus operandi* can be employed, by dilating the anus and rectum, and, if necessary, dividing the sphincter ani muscle.

After an operation in which the bladder is involved a catheter must be introduced and worn, so that no urine may collect, which, by distending this organ, and coming in contact with the paired borders of the fistula, would prevent union. If the operation does not involve the bladder, the urine need only be drawn off at regular intervals by the means of a catheter. For the first-mentioned purpose M. Charrière, sen., has had the following form of catheter made after my design, which may be worn with more comfort and less chance of being displaced than the ordinary instrument (see fig. 2). It is a modification of the one invented and employed by Dr. Sims.



The instrument, as I have modified it, is composed of silver, between three and four inches in length, and curved somewhat in the form of the letter S, that its extremity may not come into contact with the wound, and by bruising it, interfere with the healing process. Its short length also prevents its making injurious pressure against any part of the wall of that viscus.

The vesicular extremity, D, for the distance of an inch and a half, is furnished with four rows of holes, opposed to each other, of a line or more in diameter. About an inch and a half from the last holes, towards the vulvar extremity, are placed two rings, E, by which the catheter is secured in position by tapes attached to a band encircling the body. The vulvar extremity, F, is made very oblique to facilitate the dropping of the urine, and around this extremity is placed a shoulder, G, above which is tied the neck of a gum elastic bag, capable of containing about a pint and a half of fluid, and having at the opposite and depending side another neck, to which is attached a stop-cock, through which the bag may be emptied without disturbing the catheter or inconveniencing the patient. This urinary bag may be very conveniently supported by means of the suspensory bandage, through which the stop-cock is made to protrude.

By this arrangement the following advantages are secured: The catheter need only be removed often enough to be kept free from mucous and phosphatic accumulations, and the disposition to their deposit will be much lessened by preventing the entrance of air into the bladder through the catheter by this means.

Also, by the use of the urinary bag the disgusting odour arising from the decomposition of the urine in an open vessel is prevented, as well as the inconvenience of such vessel in the necessary position.

Again, after the removal of the pins, it is necessary that the catheter be continued for some time, and great care exercised, lest the weak cicatrix be strained or lacerated. During this part of the treatment the urinary bag will be found especially convenient and necessary, as the patient need not then be confined to her bed.

Upon the catheter, behind the two rings E, may be placed very advantageously a disk of gum elastic the size of a franc, which will prevent the pressure of the rings against the soft parts of the patient, and by the thickness of this disk of gum elastic, the length of the catheter in the bladder may be graduated, this organ being always much reduced in capacity by reason of the loss of substance it has sustained, and in a contracted condition, from being empty for a longer or shorter time. I have presented a knowledge of my methods, as here described, to many of the first surgeons of this city, among whom I may mention Professors Velpeau, Nélaton, Jobert (de Lamballe), Ricord, and Chassaignac, and they have everywhere been received with high approbation and thanks.

M. Velpeau offered to permit me to perform the first operation of the kind that should present in his wards at La Charité, and by a polite invitation of M. Michon, of La Pitié, I demonstrated upon the dead body before his class of students and a number who were invited to be present, my different methods of operating, and the Professor, in his succeeding lecture, spoke of it in the highest terms, and gave me the same invitation that M. Velpeau had done. It was not my intention to send a record of the results of my investigation and deliberations upon the subject of vaginal fistulæ for publication either to England or America until I had prosecuted them further, and could embody the reports of the Academies of Medicine and Science upon communications that will soon be made there; but I have been decided to do so without delay from the circumstance before related.

It is my intention to publish before long a memoir upon the subject of fistulæ in general, and their treatment.

Paris.

JERSEY HOSPITAL REPORTS.

By G. M. JONES, Esq.

Surgeon to the Jersey Hospital.

FRACTURE OF THE LEFT FEMUR, CAUSED BY A MINIE RIFLE BALL.

SECOND FRACTURE, UPWARDS OF A YEAR AFTER—REMOVAL OF MORE THAN THREE INCHES OF THE ENTIRE CIRCUMFERENCE OF THE BONE—PERFECT RECOVERY, WITH A USEFUL LIMB.

Patrick Sullivan, aged 29, a pensioner, 5 feet 11 inches in height, well proportioned and apparently strong, was admitted into the hospital on the 3rd of July, 1856. The following is the history of his case:—

He enlisted in 1847, and was attached to the 62nd Regiment of foot at the taking of the Quarries in the Crimea; there he was severely wounded by a Minié rifle bullet, which entered the left thigh a little above the external condyle of the femur, and was extracted about an inch below Poupert's ligament; the femur was fractured, and the hæmorrhage so great that it was deemed advisable to keep him on the field till evening; he was then removed to the regimental hospital where he remained for five weeks. Afterwards, he was taken to the Castle Hospital, Balaklava, and remained under surgical treatment several months. In January following, he embarked for England, and after a short stay at Portsea General Hospital, he was ordered to Chatham, and there discharged the service. On his arrival in Jersey he was unable to walk without adventitious support, "the thigh bending," as he expresses himself; rather below its middle, and at its external aspect, there existed a small opening, from which a semi-purulent discharge, trifling in quantity, occasionally flowed. An hour before his admission into Hospital, he slipped while walking, fell on the injured side, and immediately experienced very severe pain along the entire shaft of the bone, and arterial blood was freely discharged from the opening already alluded to. Cold applications, were employed, and those other means which the nature case suggested, but without avail.

As it seemed perfectly evident that considerable fresh mischief existed, independent of the old fracture, I decided, with the concurrence of my medical friends, to have recourse to operative measures, and on the fourth day after his admission the following operation was performed.

An incision was commenced two inches below the trochanter, and carried downwards through the soft structures full 10 inches in length. On introducing the finger into the wound, it at once became apparent that an extensive comminuted fracture existed; the lower fragment was wedged behind the upper, and the little finger could easily pass through an opening, which, from its direction, may have been occasioned by the bullet. Here and there, detached portions, only held by integument, were felt, and for some extent bone divested of its periosteum was discoverable. It now became evident that no other plan excepting amputation of the fractured ends and diseased parts, could offer any prospect of ulterior benefit. To effect this the bones were, first of all, freed from their surrounding textures, retractors employed to keep back and protect the soft parts as much as possible, then the loose portions were removed from their attachments by cautious dissection, and lastly the fractured ends were sawn through their entire circumference. The smooth and healthy parts were now as carefully approximated as they could be, the lips of this immense wound brought here and there together by sutures, water dressing applied, and the limb secured in a suitable box, its external flap reaching from beyond the foot to under the axilla; $3\frac{1}{2}$ inches of the thigh bone were removed, the number of pieces amounted to 27; there was considerable hæmorrhage, but no vessel required ligature.

The suppuration which followed was extremely great, and lasted for weeks; the constitutional derangement less than might be expected. A very large quantity of wine, spirits, and malt liquor were taken during the period of cure, also meat and every thing nourishing.

This patient was discharged cured; most perfect bony union exists, there is much apparent bowing of the outer ends of the thigh, but this arises from the enormous amount of callous which has been thrown out, and not from any bend in the bone itself. The patient wears a boot with its heel near 4 inches thick, can walk with only the assistance of a small stick 10 or 12 miles at a time, and can also walk well without any assistance whatever. His health is excellent. I have omitted stating that when he entered the hospital, the knee-joint was completely ankylosed, and I have thought it more prudent, for reasons which must be obvious, to abstain from interfering with that which, under existing circumstances, I consider to be more beneficial than otherwise.

FRACTURE OF THE LEFT FEMUR, CONSEQUENT ON DISEASE OF THE BONE.

AMPUTATION OF THE DISEASED ENDS TO THE EXTENT OF NEAR THREE INCHES—PERFECT RECOVERY WITH A USEFUL LIMB.

Case 2.—Henry Le Breton, aged 25, by trade a house painter, healthy looking, florid complexion, moderately stout, five feet nine and a half inches in height, was admitted into the hospital May 1st, 1856, in consequence of an accident he met with two days before. He then gave the following account of the accident, and of the symptoms which preceded it:—

For five months he occasionally experienced (when walking) a sudden halt, which obliged him to rest for two or three seconds; days together he was without it, on other occasions it occurred three and four times in as many hours; this he at first disregarded, and attributed it more to flying rheumatic pains than to any other cause; it never kept him from his employment, though he latterly rather dreaded mounting ladders, and preferred that work which could be accomplished standing. On the 29th April he jumped off a wall not three feet high, and so injured the left thigh as to be totally unable to walk. He was shortly seen by a Surgeon, and two days after became an inmate at the hospital.

The limb on examination was discovered to be about three quarters of an inch shorter than the right; there existed extraordinary mobility rather below the trochanter, in fact a complete universal joint; no crepitus was, however, distinguishable; all signs of constitutional disturbance were wanting; the parts were cool; no tension, and a total absence of pain; deformity was alone apparent. Suitable appliances were at once employed, and the injured parts examined a month afterwards. Appearances and symptoms were then exactly the same as at first. Another four weeks' trial was

allowed, and the only visible alteration then was increased bulk of the upper third of the thigh, which, on being grasped, had a hard, bony feel. The constitution, which had for a considerable time remained undisturbed, had lately become affected, and, although no pain was complained of, loss of appetite, great and sudden emaciation, restless nights, occasional shivering fits, &c. &c., were symptoms of by much too serious a character, particularly when taken in connexion with the early history of the case, to allow much hope that ordinary means could bring about ultimate recovery. I therefore lost no time in first of all making a free incision along the outer and upper part of the thigh, for the purpose of exploration, and, satisfied with the nature of the case, felt no hesitation in carrying out substantially the same operation as in the first case. In this instance the femur was in a much more diseased state than in the other; detached pieces were to be met with in all parts, so that twenty-six pieces, small and large, were removed by the saw and bone nippers before healthy cancellous structure was apparent and smooth ends obtained. There was much bleeding, but no vessel required ligature.

For upwards of three weeks after the operation the patient remained in a most precarious state; it was almost immediately followed by an immense bed sore, which showed itself on the right nates, and sloughed to an extraordinary degree; the greatest difficulty was experienced in keeping the amputated ends of the femur in position; the upper portion, sawn off at the margin of the trochanter, had a constant tendency to project upwards; and it was only by means of various appliances, and pulleys to the ceiling, by which the pelvic region might be raised or depressed at pleasure, and other mechanical contrivances, to act in the like manner on the extremity itself, that the two ends of the bone were kept in apposition. The suppuration was immense, and continued for weeks; the weakness extreme; and I must here remark, that to the unlimited allowance of stimuli at one time, rich nourishing soups at another, and not only insisting but seeing that nourishment, in greater or less quantities according to symptoms, must be taken every two or three hours, am I to attribute the ultimate success of this case.

I shall merely remark, that the improvement, in this instance, was very slow, but after six weeks became most rapid; and I had the satisfaction of discharging this patient from the Hospital on December 21, perfectly cured. He now walks miles, with a boot the heel of which is merely four inches high, sometimes with a stick, more frequently without one, and expresses himself as stouter and better than he had been for years.

It was supposed by many of my friends that syphilis was the cause of the bone affection. This may be. I did not, in this instance, agree with them, and, therefore, no antisyphilitic medicine was given.

Remarks.—I did not at first attach the same degree of importance to these cases as I do at present; none precisely similar, as far as the femur is concerned, had come under my observation or treatment before, but this I attributed to other reasons than their infrequency, or the generally unfavourable termination which had resulted from similar operations. Without taking into consideration the fortunate result of my two cases, it will, I think, be admitted that no other procedure than the one here followed out could have attained the desired object. Evidently union had never been established in Sullivan's case, and it is presumable never would have been by natural means, even had a subsequent accident not occurred, for, independently of the false joint, the four days which elapsed between the fall and the operation were insufficient to produce that amount of disease in the bone which manifested itself when operative measures were resorted to, so that the other more ordinary and more generally successful ones recommended were altogether inapplicable to this, and must naturally have ended in total failure. Fauvel's case was so analogous to Sullivan's that I felt no hesitation in pursuing the same line of treatment. There exists, however, this striking difference between the two; in the latter a minié rifle ball produced the fracture in a healthy structure, which, in consequence, became the seat of disease; in the former disease was evidently the cause of the fracture. The sudden halt which came on five months before, and the increasing pain, together with the more frequent inability to walk since that time, afford at least very presumptive proofs that disease of the femur had been daily progressing, so that the fall

merely accelerated that which eventually under any circumstance must have taken place. In neither case could blisters, setons, pegging, according to the Dieffenbach method, or other means to produce irritation and inflammation of the parts, have offered the least chance of success. Here we had comminuted fracture, detached pieces of bone held by integument, but separated altogether from the main shaft, and the fractured ends not only overlapping each other but in a state of disease, so that, even suppose these unhealthy parts could have been thrown off by suppuration and exfoliation, an immense vacuum between the fractured ends must have followed, and a perfectly useless limb have been the consequence.

I have been unable to meet with the full history of any case in which this operation has been performed, but on consulting authorities I find it regarded as most difficult, long in performing, hazardous to life, and most unquestionable in its results. It is thus spoken of:—"By far the most severe operation which has ever been performed (in the thigh bone) is the complete removal of the fractured extremities, by cutting through the soft parts, and then sawing off the ends of the bone. This operation is attended with very considerable danger, and is so unsuccessful that it is now seldom attempted." (a) "Sometimes an incision has been made through the soft parts, the fractured ends of the bone have been exposed, and the Surgeon has actually sawn off a part of the ends. This, I need not observe, is a very important proceeding. If it is in the fleshy part of the thigh it must be a very difficult thing to accomplish. You have to inflict a very extensive wound, a wound very likely to be followed by considerable inflammation, and that with a still more serious effect. In many instances in which this has been done, the patient has at least been left in a worse condition than he was before." (b) "It would only be the most urgent necessity that would make me attempt such an operation on the thigh." (c) "I think this operation is only applicable to the upper arm and leg . . . but not in the thigh or forearm." (d)

That my cases should have terminated so very satisfactorily, and so contrary to the general opinion entertained with reference to an operation which alone can have the credit of bringing about this wished-for result, may appear strange; but scarcely more so than the singular occurrence of two so identical in many points, and both necessitating the same line of practice should have happened within a few days of each other, and have been pronounced cured at the same time. Still, if I may be allowed to hazard an opinion on the first point, I must say, it strikes me, that possibly those who have failed in this operation may have been over anxious to preserve length of bone, and thus been too sparing with the saw. In a case of scirrhus, our first object is to excise those parts which we feel satisfied are diseased, our second to remove any portion we may think possesses a suspicious appearance, or a tendency to disease; we are more willing to sacrifice healthy structure than to please ourselves with the belief that not a particle save that which is the reverse has been removed, and so ought our practice to be as regards the ununited ends of bones. It will be seen that in both my cases I fully followed out the plan I consider the best to follow. The sawn ends in each were perfectly smooth, without a trace of disease, and met well together, and to this procedure I attribute the success I obtained.

ON A PHYSIOLOGICAL ACTION OF THE DISULPHATE OF QUINA.

By H. RANKE, M.D.

BEING engaged in a series of observations on the excretion of uric acid in health and disease, and under the influence of different drugs, I have observed an action of the disulphate of quina upon the healthy organism, which seems to me worth being recorded even before I shall be able to give the results of my other observations and experiments.

I found, as the uniform result of five experiments which I have made on three healthy individuals, that the disulphate of quina diminishes the quantity of uric acid in the urine.

The importance of this action of the drug, if it prove to be constant, is obvious. Hitherto our notions on the physiological action of quina have been exceedingly deficient, and so is our knowledge of the real nature of ague, for which quina is such an admirable remedy. Now in ague there is, according to all observers, a considerable increase of uric acid in the urine, and moreover the spleen, the organ principally affected in ague, contains, according to Scherer, normally, some uric acid. Is it not possible that, by the study of the physiological action of quina, we may in time be able to throw some light even upon the nature of ague and the process of its cure?

The usual method was employed for the determination of the uric acid; that is to say, 100 cubic centimeters of the urine were mixed in a test-glass with 6 cubic centimeters of concentrated hydrochloric acid, and left to stand for forty-eight hours. Then the uric acid, which had been precipitated, was carefully collected upon a filter. The weight of the filter in a perfectly dry state had been determined in the watch-glass apparatus. The uric acid was washed until the water that ran off the filter had ceased to have an acid reaction. The filter was then again dried in the air-bath and weighed, and the difference between the first and second weighing was calculated as uric acid.

The following are the numbers I thus obtained, and from these the reader may draw his own conclusions. I excrete, on an average, when in a healthy state, and living on a mixed diet, 0.629 grammes of uric acid during twenty-four hours. This average is taken from twenty observations. Maximum, 0.832; minimum, 0.455; and the figures of this series are distributed thus: 0.8 and 0.7 occur twice each; 0.6 eight times; 0.5 seven times; and 0.4 once.

Now, in the first experiment I took 20 grains of disulphate of quina in the course of the day; and during the next forty-eight hours the excretion of uric acid amounted in all to 0.542 grammes, which gives for twenty-four hours 0.271 grammes, or less than half my normal quantity.

The second experiment gave a similar result, the quantity of uric acid excreted during 48 hours, after 15 grains of quina had been taken, being equal to 0.790 or 0.395 for 24 hours. On the third day, after quina had been taken, I excreted again about my normal average, namely 0.621 grammes, and on the two following days 0.543 and 0.656 grammes respectively. I now took quina for a third time, and the quantity of uric acid again fell to 0.438 grammes on the first, and to 0.192 grammes on the second day.

The fourth and the fifth experiments were made on two of my Medical friends who kindly volunteered to take quina. Here are the results.

Dr. S. excreted during the two days previously to his taking quina 0.544 and 0.543 grammes of uric acid. On the third day he took 20 grains of disulphate of quina, in two 10 grain doses, and on that day he excreted 0.376 grammes of uric acid. The next morning he again took 5 grains of quina, and the quantity of uric acid subsequently fell to 0.317 grammes. During the three following days he excreted 0.483, 0.450 and 0.654 grammes respectively.

Dr. M. excreted during four days prior to his taking quina 0.662, 0.774, 0.585, and again 0.585 grammes of uric acid. Then he took 10 grains of quina, and on that day excreted 0.358, and on the next 0.387 grammes of uric acid. On the third day after he had taken quina the uric acid rose again to 0.670 grammes, and remained there stationary, amounting to 0.671, and 0.668 grammes on the two following days.

To the foregoing statement I have to add that in two of the experiments I have also determined the other constituents of the urine. The solids in general, and the urea, I found not materially affected under the influence of quina, but the phosphoric acid appeared to be augmented. However, these points require a good deal of further investigation, and I therefore abstain here from giving details.

I hope to read very soon that others have repeated the experiment, and that we shall thus get more materials towards arriving at the truth.

To those who might be inclined to repeat the experiment I have to add one or two remarks. There are occasionally persons met with who, though apparently in good health, excrete uric acid with great irregularity, the maximum and minimum being widely separate from each other; such persons should not be used for the experiment, as it would be necessary in these cases to take the average of a great many obser-

(a) Wardrop. Observations on the Methods which have been employed to produce Reunion in Fractured Bones. Medico-Chirurgical Transactions.

(b) Lawrence's Lectures on Surgery.

(c) Fergusson's Practical Surgery.

(d) South. Chelius' System of Surgery.

vations in order to obtain reliable results. Moreover, it is advisable to take during the time of observation not too much fluid, as great dilution of the urine tends to make the determination of the uric acid less accurate.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

STATISTICAL REPORT OF THE PRINCIPAL OPERATIONS PERFORMED DURING THE FIRST QUARTER OF 1857.

THE subjoined Report includes, as usual, the following Hospitals:—University College, King's College, St. Bartholomew's, St. George's, Guy's, St. Thomas's, the London, the Middlesex, the Westminster, Charing-cross, St. Mary's, the Metropolitan Free, the Marylebone, the Hospital for Sick Children, and the "Dreadnought" Seamen's Hospital.

LITHOTOMY.

Number of cases, 13; Recovered, 11; Died, 2.

Case 1.—The London: Mr. Wordsworth.—A healthy boy, aged 6, symptoms for two years. A lithic acid calculus, the size of a filbert, was removed, the operation having been performed on a straight staff. A sharp arterial hæmorrhage afterwards was arrested by the use of ice, and by pressure on the internal pudic artery with the finger in the rectum. It ceased after a short time, and the boy recovered well. *Case 2.*—Guy's: Mr. Cock.—A lad, aged 18, in good health. Symptoms of an impacted stone in the urethra had existed three days. The incision was made in the median line. The stone, which was a small one, was found in the anterior part of the prostatic urethra, and easily slipped out when exposed. Recovered. *Case 3.*—Guy's: Mr. Cock.—A boy, aged 2, in good health. Symptoms for eight months. The operation in the median line was performed, and a small stone easily extracted. Troublesome bleeding followed, but not such as at any time to endanger life. Recovered. *Case 4.*—Guy's: Mr. Cock.—A lad, aged 10, in good health. The operation in the median line was performed, but owing to the stone being imbedded in a pouch of the prostate and neck of bladder, some difficulty was encountered in extracting it. It was pushed into the bladder before it could be seized. It was about the size or rather larger than a mulberry, having been moulded by the sac in which it lay. The symptoms of stone had existed some years, and the position in which the stone lay was well known beforehand, as the boy had for some time suffered from great obstruction and constant incontinence of urine. The bladder had been habitually full, the urine flowing away involuntarily. When an instrument was passed it encountered the stone as an impediment in the prostatic urethra. The boy recovered well after the operation, and regained perfect control over the bladder. *Case 5.*—Guy's: Mr. Hilton.—A healthy boy, aged 4, long subject to symptoms of stone. A lithic acid calculus, the size of a prune, was removed by the usual operation. Recovered well. *Case 6.*—King's College Hospital: Mr. Fergusson.—A man, aged about 20, in fair health. A stone of considerable size was removed by the usual operation. Recovered. *Case 7.*—King's College Hospital: Mr. Bowman.—A boy, aged 8, in fair health. Removal of a small stone by the usual operation. Recovery. *Case 8.*—The Metropolitan Free: Mr. J. Borlase Childs.—A healthy boy, aged 8. A stone of considerable size was removed by the usual operation. Recovery. *Case 9.*—St. George's: Mr. Pollock.—A boy, aged 4, in good health. A small flattened stone was removed by the usual operation. Recovered. *Case 10.*—St. George's: Mr. Johnson.—A boy, aged 5, in good health. A small mulberry stone was removed. Recovered. *Case 11.*—St. George's: Mr. Tatum.—A feeble man, aged 66, who had suffered from stone for two years. Five years ago he had passed a small fragment of stone. Lithotomy was attempted on February 28th, but the instrument would barely grasp the stone, and could not be made to break it. When removed it was found to have a length of more than two inches, and a breadth of an inch and a half; its weight being

1040 grains. It consisted of lithic acid. Some symptoms of peritonitis followed the operation, which he got over, and afterwards did well. Recovered.

Case 12.—Guy's: Mr. Cock.—A labourer from the country, aged 56, in miserable health, and the subject of symptoms of stone for three years. His urine was very scanty, loaded with mucus, and fetid. He suffered much from vomiting. A large calculus, the size of a hen's egg, was removed, which consisted of alternate layers of mulberry, phosphatic and lithic acid deposit. He never rallied from the operation, and death occurred on the second day. At the autopsy extensive disease of both kidneys was found. *Case 13.*—King's College: Mr. Fergusson.—A fairly healthy man, aged 65, the subject of enlarged prostate. Two flattish calculi of considerable size were removed, and the third lobe of the prostate, which projected upwards, was excised. (See *Medical Times and Gazette*, April 18, page 385.) The man did fairly for some days, but ultimately sank, and died at the end of three weeks. The autopsy showed inflammation of the bladder, and old-standing disease of both kidneys. No suppuration had occurred about the bladder or prostate. The mucous membrane of the bladder was coated with lymph.

HERNIOTOMY.

Case 1.—Guy's: Mr. Cock.—A woman, aged 68, previously in good health. Hernia femoral, strangulated seven days, the size of a walnut. The taxis had been much abused, and the skin was livid and oedematous; purgative and other medicines had also been freely given. After division of the skin the cellular tissue and fascia were found gangrenous, and gave way so readily under the finger, that no further employment of the knife was needed. No bleeding whatever took place. The sac gave way on being touched, and the bowel was exposed. The bowel itself was not gangrenous, but was much inflamed and covered with lymph. It was a small knuckle, corrugated and hard. The adhesions about the neck of the sac were gently divided, and the constricting ligament having been notched the bowel easily returned. The bowels acted spontaneously the next day, and the case did uninterruptedly well. The free exhibition of stimulants was required during the time that the sloughs were separating. *Case 2.*—The London: Mr. Critchett.—A widow, aged 69. Hernia femoral, the size of an orange, strangulated four days. The patient was very low at the time of operation, and the symptoms had been severe. The gut was filled with hardened faeces, and its outline could easily be traced with the finger. It was intended to avoid opening the sac, but during the attempts at reduction the latter gave way, and it was afterwards laid open and reduction effected. The bowels acted the following day after castor oil and an enema. Slight symptoms of peritonitis were combated by opium, and she made a good recovery. *Case 3.*—The London: Mr. Critchett.—A man of middle age, the subject of a large scrotal hernia. It had been strangulated twenty-eight hours. Reduction was easily effected after the tissues about the neck of the sac had been divided, and without opening the latter. Recovered. *Case 4.*—The London: Mr. Adams.—A woman, aged 67, of good constitution, was admitted with a large femoral hernia, which had been strangulated sixteen hours. The sac was opened, and a large mass of omentum and bowel exposed, the former being adherent. The adhesions having been separated the whole was returned. Recovered. *Case 5.*—The London: Mr. Ward.—A woman, aged 24. Hernia femoral, the size of a hen's egg. The bowel was incarcerated rather than strangulated, the symptoms not being severe. The protrusion had been down for a year, but had increased in size eight days ago. Enlarged glands were found about the sac, and all the tissues were thickened and inflamed. The sac was opened, and was found to contain inflamed omentum. Opiate treatment. Recovery. *Case 6.*—The London: Mr. Wordsworth.—A woman, aged 60. Hernia inguinal, the size of a hen's egg, strangulated four hours. The sac was opened and reduction effected. Recovery. *Case 7.*—The London: Mr. Luke.—A boy, aged two years. Hernia scrotal (not congenital), the size of a goose egg. Strangulation twenty-two hours. Sac not opened. Recovery. *Case 8.*—The London: Mr. Curling.—A man, aged 60. Hernia scrotal, large and tense; it had for long been partially irreducible. On opening the sac a large quantity of thickened omentum was exposed, which, as it could not well be returned, was cut away. Under treatment. *Case 9.*—St. Thomas's: Mr. South.—A healthy man, aged 30. Hernia scrotal, strangulated

twenty-eight hours. Sac opened. Omentum and bowel were found in the sac, and the former being adherent, a portion of it weighing four ounces was cut away. Recovered. *Case 10.*—St. Thomas's: Mr. Le Gros Clark.—A woman, aged 74. Hernia femoral, strangulated twelve hours. Sac opened. The wound healed almost entirely by the first intention. Recovered. *Case 11.*—St. Mary's: Mr. Ure.—A labourer, aged 37. Hernia oblique, inguinal, strangulated twelve hours. He was in a very favourable condition. Sac opened. Recovery. *Case 12.*—St. Mary's: Mr. Lane.—A woman, aged 54. Hernia femoral, the size of a hen's egg, strangulated forty hours. The sac was opened, and found to contain intestine and omentum. She was in good condition at the time of the operation, and afterwards did well. *Case 13.*—St. Bartholomew's: Mr. M'Whinnie.—A married woman, aged 38. Hernia femoral, the size of a pigeon's egg, strangulated ten days. The sac was opened, and found to contain only a mass of thickened omentum, which was cut away. Recovered. *Case 14.*—Guy's:—Mr. Cooper Forster.—A woman, aged 40, in good health. Hernia femoral, of small size. Strangulation had existed about fifty-four hours, and the sickness had been very severe, but there were no signs of peritonitis. The sac was opened, and reduction effected. No ill symptom followed the operation, and she left the Hospital quite well, and wearing a truss, on the twelfth day. *Case 15.*—Guy's: Mr. Cooper Forster.—A woman, aged 65, in good health. Hernia femoral, strangulated four days. She was very ill. The sac was opened, and its neck having been notched, the bowel easily slipped up. Recovered well. *Case 16.*—St. George's: Mr. Cutler.—A robust man, aged 48. Hernia inguinal, and strangulated twenty hours. The sac was opened, and found to contain bloody serum, coagula, and a knuckle of intestine. The bowels acted spontaneously soon after the operation, and the convalescence was rapid. Recovered. *Case 17.*—St. George's: Mr. Prescott Hewett.—A woman, aged 33, in good health. Hernia femoral, strangulated forty-eight hours. The sac was opened, and a small knuckle of intestine, inflamed and covered with lymph, was exposed. The stricture was very tight. Slight symptoms of peritonitis followed, but were subdued, and the recovery was rapid.

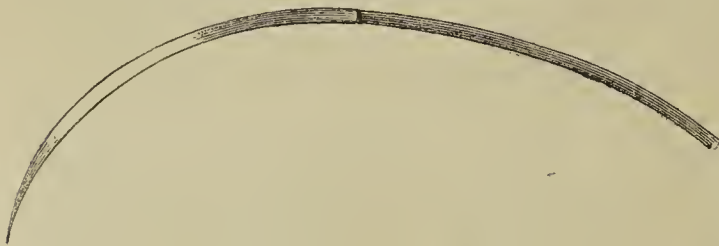
Case 18.—Guy's: Mr. Hilton.—A man, aged 51. Hernia, direct inguinal, and of very large size indeed. Strangulation had existed for twenty-four hours, but the symptoms were not very severe. A patient attempt at taxis having failed, the operation was resorted to, and the sac opened. In notching the margin of the ring, the epigastric artery was divided, and bled freely until secured by ligature at both ends. The bowel was returned, and retained with much difficulty. During the night severe vomiting recurred, and the intestine was again forced down, and could not be reduced. Death occurred sixteen hours after the operation. At the autopsy about nine feet of small intestine were in the sac, apparently the same part which had been originally strangulated. *Case 19.*—St. Bartholomew's: Mr. Wormald.—A labourer, aged 26. Hernia serotal, the size of a child's head, and exceedingly tense at the time of admission, which was three hours after its protrusion. Two hours elapsed between admission and the operation, during which interval the tumour increased to double its size, and the skin had become livid. The sac was opened, and more than two feet of bowel were found down. The hernia appeared to be direct. Death from peritonitis followed within thirty-six hours. *Case 20.*—St. Bartholomew's: Mr. Stanley.—A feeble woman, aged 60, for many years the subject of reducible femoral hernia. Strangulation had existed six days, and the taxis had been abused prior to the operation. Symptoms of peritonitis already existed. The sac was opened, and the exposed intestine appeared healthy. Death forty-eight hours afterwards from peritonitis. *Case 21.*—Guy's: Mr. Birkett.—A man, aged 43, admitted in a state of collapse. Hernia inguinal, and strangulated for many hours. The sac was opened, and the bowel returned. Death from collapse three hours afterwards. *Case 22.*—The Middlesex: Mr. Shaw.—A woman, aged 38. Hernia femoral, and long strangulated. The gut was found gangrenous, and was laid open. The patient sank gradually, and died of inanition eight weeks after the operation. *Case 23.*—St. George's: Mr. Tatum.—A woman, aged 63. Hernia femoral, of small size. The date of strangulation was uncertain, but had probably been several days, as she was in a state of collapse. The sac was opened, and a small knuckle of intestine, not apparently gangrenous, was found. Death followed in a few hours. No autopsy.

Case 24.—St. Bartholomew's: Mr. Lloyd.—A woman, aged 48. Hernia femoral, of small size, but very tender. Strangulation three days. The symptoms were urgent, and her condition bad. Immediate operation, the sac being opened. The sac was found to contain omentum and intestine, which had formed adhesions: the gut was black but polished. The adhesions were separated, and the gut returned. Death. *Case 25.*—St. Bartholomew's: Mr. Lloyd.—A stout woman, aged 45. Hernia femoral, and very large; strangulated fifteen hours. Peritonitis was already present. The sac was not opened. Death from peritonitis ten days after the operation. *Case 26.*—St. Bartholomew's: Mr. Lloyd.—A woman, of middle age. Hernia femoral; strangulated fifteen hours. Symptoms severe, and severe peritonitis already existing. The sac was not opened. For twenty-four hours after the operation she seemed doing fairly, but at a later period there was inflammation of the cellular tissue of the abdomen about the wound which required leeches. Flatulence was afterwards very troublesome. Death from exhaustion followed, notwithstanding that during the last few days she took nourishment and stimulants freely. Death eleven days after the operation. *Case 27.*—St. Mary's: Mr. Ure.—An infant, aged 14 months, Hernia scrotal, congenital; strangulation forty hours. A truss had been worn, through the pressure and friction of which ulceration had resulted near the abdominal ring. The sac was opened, and found to contain five or six inches of small intestine. Death thirty-eight hours after the operation, from peritonitis. *Case 28.*—The London: Mr. Curling.—A married woman, aged 63. Hernia femoral, the size of an orange. A portion, about the size of an egg, had been irreducible for two years, but a sudden and large increase in size had taken place a week before admission. Three days before admission the symptoms of strangulation had almost ceased, since which she had had neither pain nor vomiting. The bowels had not acted. The sac was opened, and found to contain a mass of omentum and a knuckle of bowel, the latter having given way through nearly its whole circumference. The omentum was cut away, and the bowel left *in situ*. The patient died soon after the operation. No autopsy. *Case 29.*—The London: Mr. Wordsworth.—A man, aged 60. Hernia inguinal, of large size, strangulated thirty hours. The symptoms were not severe. Sac opened and found to contain a knuckle of intestine, and nearly a pint of serum. Death on the third day, from a low form of peritonitis. *Case 30.*—Anonymous.—A woman, aged 70. Hernia femoral, strangulated four days, symptoms well marked. The tumour was very small, not larger than a marble, and some doubt as to its existence was at first felt. The operation was not performed until thirty hours after admission. In the operation it was believed that the sac had been opened and the gut returned; but the symptoms continued unabated, and death followed twenty-four hours afterwards. At the autopsy it was found that one of the layers over the sac had been mistaken for the sac itself, and that the latter had never been opened. In the sac was a knuckle of tightly strangulated and inflamed intestine, which was not, however, absolutely gangrenous. *Case 31.*—St. George's: Mr. Pollock.—A woman, aged 42. Hernia femoral; symptoms severe. The sac was opened, and a small knuckle of intestine exposed, and returned. Symptoms of peritonitis persisted after the operation, and death occurred fifty-six hours afterwards. *Case 32.*—St. George's: Mr. Hawkins.—A man, aged 62. Hernia femoral, strangulated three days. The sac was opened, and found to contain a large mass of omentum, by which the bowel was compressed. The omentum was divided, and a small knuckle of congested gut exposed. The bowel was returned, and the omentum left *in situ*, being closely adherent. Diarrhoea followed the operation, and subsequently he suffered much from an exacerbation of chronic bronchitis, to which he had long been subject. Death on the tenth day. The autopsy showed the bowel and peritonæum healthy, death having occurred solely from the state of the lungs. *Case 33.*—St. George's: Mr. Tatum.—A man, aged 60. Hernia inguinal, congenital. Strangulated forty-eight hours. The tumour was very large. After dividing the integument the sac was found ruptured (probably from violent attempts at taxis), and a quantity of serum had thus become extravasated into the serotal cellular tissue. Two large coils of intestine were exposed, not congested, but with much adherent lymph on their surface. The stricture was very tight. Peritonitis rapidly supervened, and death followed in thirty hours.

HOSPITAL NOTES.

THE LEAD WIRE SUTURE.

This suture, so much used by Dieffenbach, is not often employed in Hospital practice. Yet it is occasionally useful when it is necessary to apply a suture to any part not easily reached, especially when it is desirable that the thread or wire should remain several days; because it is easily applied, and is not likely to cut through the soft tissues. Mr. Spenceer Wells used it last week at the Samaritan Hospital in a case of vesico-vaginal fistula, in order to close a fissure which had

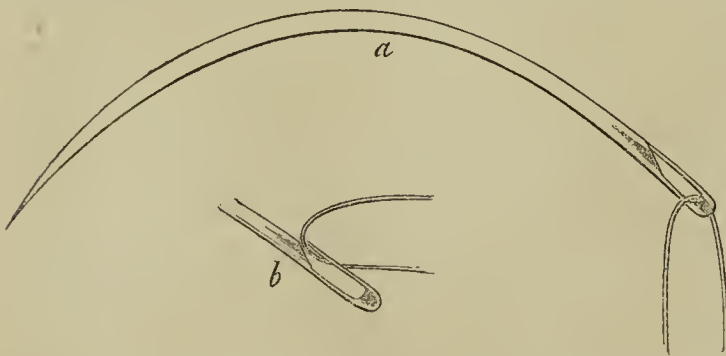


remained after the partial failure of a previous operation. The edges of the fissure having been vivified, the wire was passed by a curved needle, such as is shown above, the end of which is so made that the wire can be screwed into it. The wire is very soft and flexible, and as soon as it is passed the ends are twisted together by a pair of blunt forceps, as shown in this cut. These can be cut off at any length, and so doubled up on each other that no scratching or irritation is produced. Mr. Wells applied two of these sutures in the case just alluded to with the greatest ease, and the wire was twisted until the parts were brought into accurate apposition.



NEW NEEDLE WITH OPENING EYE.

In the operation now coming into fashion for the relief of prolapsus of the uterus, vaginal cystocele, and rectocele, by perineal suture, as revived by Mr. Baker Brown, since practised by Dr. Savage and Mr. Spenceer Wells, and more recently performed by Mr. Fergusson and Mr. Erichsen, some little delay and difficulty have been caused by the needles used for passing the deep sutures intended to support the quills. Mr. Brown and Dr. Savage use the common needle fixed on a handle, which is passed through both lips of the wound made by the removal of skin and mucous membrane. This needle is not passed very easily, and there is a little difficulty in holding the thread with forceps, and withdrawing the needle. Mr. Fergusson avoids this by using a common curved needle; but then he has to cut off his thread, and to tie a knot to form the loop which is destined to support the quill. In order to avoid this loss of time, Mr. Spenceer Wells has contrived the needle shown in the annexed cut. (a) It possesses all the advan-



tages of the open eye needle, without the disadvantages of the latter, namely, the possibility of impediment in passing it, and the probability that the thread may slip out. To all appearance the eye resembles that of an ordinary needle, but one side of it, as shown here, (b) is made to open, so that the thread can be drawn out, the side closing again instantly by its elasticity. Needles on this plan will probably prove useful in other operations. Those used by Mr. Wells have been made for him by Messrs. Whicker and Blaise, of St. James's-street.

EPITHELIAL CANCER OF THE LABIA, ETC., AT AN EARLY AGE.

Mr. Lloyd has under his care in St. Bartholomew's a case of epithelial cancer of the female genitals, which presents some peculiar features. In the first place we may advert to the diagnosis, it having been originally admitted into the Venereal ward as a case of gonorrhœal warts. The woman's age only 29, and her appearance of fair health, were not likely to suggest the idea of cancer. She was a widow, the mother of several children, and strongly denied that, since her husband died, about eighteen months, she had ever been exposed to the risk of venereal disease. The first symptom she had noticed was a violent itching about the parts, after which a crop of what she thought warts appeared. This was about eight months ago. When admitted, both labia and a considerable extent of the mons, were involved in an ulcerated surface, covered with hard, irregular growths, and discharging a very offensive matter. Mr. Lloyd from the first suspected their malignancy, and, after a short time, the tendency to ulcerate deeply, the sinuous and indurated borders to the ulcers, the fœtor of the discharge, and the pain endured, made this diagnosis a certain one. A consultation was held as to whether the disease might be excised; but on examining the vagina, the ulceration was found not only to involve the urethral meatus, but to extend so high up as to put an operation wholly out of the question. Nor is it a case at all promising for the employment of escharotics. The woman suffers exceedingly from pinching and stabbing pain, and is rapidly losing flesh. As far as she knows, none of her relatives ever had cancer, or any kind of tumour, a fact the more noteworthy when her unusually early age is borne in mind. We do not recollect to have noticed, of late years, an example of epithelial cancer of the genitals under the age of thirty, and, in a general way, it is certainly met with at a much later period of life.

IODINE INJECTIONS IN OVARIAN DROPSY.

A case of ovarian dropsy has recently ended fatally, in which the injection of iodine had been twice resorted to during the past year. The patient was a married woman, of about 40, and was an in-patient, under Dr. Barnes' care, in the Metropolitan Free Hospital. The cyst was originally a large one, and appeared to be unilocular; and as the patient was in fair health, the case seemed a very suitable one for the injection treatment. It is about a year since the first tapping and injection. The cyst refilled slowly, and never again attained anything like its original size. The second injection was about four months after the first. It was proposed on a third occasion to have again injected it, but circumstances occurred during the tapping which induced Dr. Barnes not to proceed with his plan. On each occasion much pain and symptoms of prolonged and severe irritation followed the injection, attended with much sickness and irritability of the stomach. After the second the patient never regained her strength. It would be unfair to assert that these inconveniences resulted solely from the iodine, inasmuch as after the last paracentesis, when no injection was practised, they were more severe than ever before. The vomiting continued for many weeks, and such was the prostrate condition into which it reduced her, that for two months before her death it was a wonder how she continued to exist. All remedies that could be hopefully tried were resorted to, but without avail; and at length no solid food whatever could be taken. At the autopsy the corpse was extremely emaciated, the abdomen being moderately filled by a mass, the size, perhaps, of two adult heads placed together. The larger sac contained a grumous, thick fluid, and much jelly-like lymph. Behind it were several other and smaller cysts. All the cysts had intracystic growths, which were softening and in process of disorganization. The cysts were united in all parts by strong adhesions to the abdominal parietes, and in several parts interstitial depôts of pus existed. The cysts, both internally and over their peritoneal surfaces, had evidently been involved in repeated and acute inflammations.

EXCISIONS OF THE KNEE-JOINT.

This important improvement in modern surgery has gained a very influential supporter in Mr. South, the Senior Surgeon of St. Thomas's, etc. During the last six months Mr. South has performed the operation three times, and in the first two instances with an encouraging degree of success. The third was

on Saturday last, and of it therefore nothing can as yet be said. In the first there was necrosis of bone afterwards, and much trouble was encountered in keeping the parts in good position. A useful limb has, however, been obtained. In the second, the limb is perfectly straight, and the thickening about the part is fast subsiding, the lad's health meanwhile improving. With one or two exceptions, this operation has now been performed at all the more important of our London Hospitals. Opinion is certainly advancing in its favour, and it may be fairly expected, that before many years it will have superseded amputation of the thigh, in cases of diseased knee-joint, almost as completely as excision of the elbow-joint has done that of removal of the arm.

CHLORATE OF POTASH IN CERTAIN FORMS OF OPHTHALMIA.

Mr. Critchett has recently been employing the chlorate of potash in certain cases of pustular ophthalmia under his care at the Moorfields Hospital, and with much success. The class of cases chiefly selected has been that of pustular inflammations, with some diphtheritic exudation and much irritability. In some of these the pustules often present an appearance almost like that of aphthæ over their surface. The condition is most usually met with in children, though not in the very youngest. In some Mr. Critchett has been exceedingly pleased with the speedy nature of the effects obtained; and in almost all it has appeared to exercise more or less of beneficial influence. The doses given have been from 10 grains to a scruple, three times a day.

ABUSE OF THE TAXIS IN CASES OF HERNIA..

We have often taken occasion to direct attention to the ill consequences which so frequently ensue from the over-zealous employment of the taxis for the reduction of strangulated hernia. Case No. 1 on our list of Herniotomy, given at page 538, furnishes us with a text on this subject too instructive to be passed by unnoticed. The skin was already livid, and the tissues beneath it were absolutely disorganised by gangrene, including the sac itself. Fortunately the bowel, protected probably by the surrounding fluid, had not been injured to so great an extent. Now it is clear that this state of things was the result of external violence, and not of long continued strangulation, since had the latter been its cause, the bowel would have been the first to suffer. It is really lamentable to think how much the prospects of hernia cases after operation are often prejudiced by the too prolonged and too violent efforts to procure reduction by the taxis. Cases in which, at the time of operation, gangrene is just impending occur not at all unfrequently in our Hospitals. The abuse of purgative medicines is yet greater, and leads to still worse results. We speak openly and without reserve upon this subject, because it is an exceedingly important one. When the opinions of those who have to treat the poor at their homes shall have come to coincide with those of our Hospital Surgeons on these two points in practice, we shall expect to see very different results indeed in the statistics of Herniotomy. A very considerable proportion of the cases now operated on in our Hospitals have, prior to their admission, had their chance of recovery greatly diminished by one or more of three errors: first, the employment of purgatives; second, the abuse of the taxis; third, the long delay which has been permitted.

RAPID RECOVERIES AFTER HERNIA OPERATIONS.

Our statistics of hernia operations (at page 539), contain several cases of unusual interest. Among these is one which was treated a few weeks ago in Guy's by Mr. Cooper Forster, and in which the patient *went out on the twelfth day, wearing a truss*, the wound having healed almost by the first intention. We have repeatedly recorded cases in which the healing process was as rapid as this, but not often those of equal completeness of recovery in so short a space. Now it is worthy of being noted that the sac had been opened in this case. It is customary for the advocates of non-opening of the sac to point triumphantly to the cases of recovery without a single ill symptom, and without the slightest inflammation of the wound, which sometimes occur, and to assert that such results are never seen after the older operation. Without, herefore, in the least wishing to prejudge the question as to

the propriety or otherwise of opening the sac as a rule, we must ask for such cases as this that they may be borne in memory when that question is discussed. Another exceedingly rapid recovery after herniotomy, which occurred some little time ago, was under the care of Mr. Prescott Hewett at St. George's, and in it also the sac had been opened.

EXPECTED OPERATIONS.

At King's College Hospital on Saturday (this day), Mr. Fergusson has an excision of the knee-joint, an operation for prolapsus ani, and one for removal of necrosed bone. Mr. Bowman has also one for the removal of necrosis of the femur. At St. Thomas's on the same day, Mr. South has an excision of the knee-joint, and an operation for the removal of a sequestrum from the radius; and Mr. Le Gros Clark has also a case of exostosis from the femur, which will be submitted to operation.

Medical Times & Gazette.

SATURDAY, MAY 30.

WINE AND ITS SUBSTITUTES.

THE notable decrease which has taken place of late years in the import of wines to this country must soon become a subject of anxiety to the Medical Profession, and in a special manner to those members connected with our public charities. It is a well-known fact, the truth of which cannot be too forcibly brought under the notice of the Profession or the public, that the disease called "oïdium," which some years ago appeared in several European countries in which the vine was cultivated, has been annually increasing its ravages to an extent that, if continued, must lead ultimately to the total annihilation of the produce of the grape. In Madeira alone, the produce of wine for several years prior to 1851, the date of the first appearance of the disease, averaged 17,000 pipes. Since that period it has annually diminished; and in the year 1855 the whole produce of the island did not exceed 29 pipes, an amount scarcely to be considered, except for the purpose of illustration. In Portugal, the country which chiefly affects us, the average annual produce for seven years prior to the appearance of the disease in 1853 was 91,532 pipes. During the past four years it has been gradually diminishing, and the returns of imports for the past year, 1856, amount only to 4001 pipes. The prices of common port at the vineyards are said to have risen 250 per cent.; and in this country the wholesale prices at the Docks have increased from 50 to 75 per cent. It follows, therefore, that our wine importers must either be subjecting themselves to enormous losses, or, what is much more probable, an inferior description of port wine is being manufactured for the English market, and sold to Hospitals, and to a class of purchasers not particularly fastidious about bouquet or quality. In truth, we have long suspected this, but have hesitated in coming to the conclusion that a particular quality of port wine, manufactured so as to counterfeit the genuine liquor, and containing, as it does, its important chemical elements, does not also possess its medicinal virtues. As far as we know, no established cause of complaint has been made on this ground, and the fact is suggestive of what might be anticipated from the employment of substitutes selected from domestic sources. The deficiency and high price of the wine, formerly in such universal use in this country, leads us naturally to consider whether a substitute could not be obtained from the vintage of some more favoured country than Portugal.

In France, Spain, the Italian peninsula and Mediterranean islands, the oïdium has not as yet committed the ravages which are apparent in Madeira and Portugal, but here again of late years the produce has been sensibly diminished. In Spain alone, the vintage during the past year is admitted not to have produced more than one-third of an average, common sherries having risen at the docks from forty to sixty per cent. The exact figures, however, with regard to the produce of these countries are not obtainable, nor is it at all likely that the wines peculiar to them will ever occupy the same position in public estimation as the more generous port. The high duties incidental to the introduction of foreign liquors have always acted as a barrier to their general use, and nowhere has the hardship been more acutely felt than in Hospitals supported by voluntary aid, where it is of the utmost importance to economise in every branch of expenditure. Successive governments have had glorious opportunities of doing a benevolent action, by absolving our public charities from the obnoxious impost, but hitherto the importance of the boon has been absorbed in the more extended area of Mr. Oliveira's annual motion. It is, however, evident from the experience of the past few years, that, irrespective of the remission of duty, we must soon be forced to look around for other expedients for the treatment of disease. Port wine has been so long in general use, and has acquired such a high character, both in its dietetical and medicinal aspect, as the best adjuvant we possess for saving life and restoring health, that we much question whether any substitute could be found to fulfil similar desirable results. The threefold properties of tonic, stimulant, and corroborant, which wine possesses, are not, as far as we are aware, to be found in the same innocuous, therapeutical combination in any other liquor, and the deprivation of its use will be felt most acutely in that class of diseases attended with prostration of all the vital energies, where its combined tonic and stimulating properties are most marked and beneficial. As substitutes for the stimulating effects of wines we most naturally have recourse to the alcoholic equivalents derived from other sources, and more especially to the spirits distilled from grain and sugar. This will be found no new innovation on established usage, as the practice has already prevailed to a great extent in many of the public charities. In Scotland and in Ireland, the use of whisky in the treatment of disease, and especially in fevers, is far more general than the administration of brandy or gin for the same purposes in the English Hospitals; and in the course of several febrile epidemics to which the large towns of the former countries are peculiarly liable, the admixture of good milk with the ordinary spirit has been not unfrequently substituted for the more expensive port, and has been found not less valuable in its therapeutic qualities because it has proved serviceable in an economical aspect. Experience has failed to confirm the proposition, that wine derived from other sources than the grape would prove equally beneficial in the treatment of disease. It is well known that beverages made from our home fruits and saccharine vegetables, represent a liquor containing the saccharine and alcoholic constituents of wine, but the carbonic and other acids generated in the process of fermentation will always forbid their use in the majority of diseases. We remember a trial being made many years ago in a Metropolitan Hospital during a visitation of fever, to substitute a sweet domestic wine made from gooseberries for the more powerful remedial agents of port and sherry, but it proved a total failure, and was very soon discontinued.

The remarks above made with reference to wine apply with equal, if not greater, force to the case of brandy, since the price of good brandy abroad has risen not less than 300 per cent., and its scarcity, as might have been expected, has given rise to the manufacture of a counterfeit material, largely used

for home consumption. The therapeutic qualities of the latter stimulant may, however, in the great majority of instances, be safely and efficiently replaced by the substitution of the ordinary grain and sugar spirits. A very valuable agent, the brandy mixture of the London Pharmacopœia, will not lose much of its virtue by having its alcoholic constituent replaced with rum, gin, or whisky; but it is essentially necessary that whatever spirit is adopted, its quality and strength should be of the most approved character. As regards the dietetical properties of wine, it is fair to assume that the want will be supplied, and perhaps efficiently supplied, by the use of good malt liquor, especially during convalescence from disease. Malt liquor possesses the threefold action which gives to wine its peculiar value, combined with an extra amount of the nutritive element. Good porter and ale, as obtained from the main marts of the London market, will be found nearly as serviceable, and are infinitely superior to any other beverages we possess for this purpose, not excepting pale or bitter ale. While it is well to be forewarned of approaching loss, we must also bear in mind that the wines which at present come into consumption are the growth of vintages of several years back, and that we shall continue to be supplied at greatly increased prices, commensurate with the prospects of the present year's crop. Perhaps, from the great exertions that are being made throughout the vine-growing countries of Europe, the vines may prove better than terrorists assume; yet we must be fully alive to the fact that the consumption of wines in our public Hospitals constitutes one of the heaviest items of their expenditure. The wine account at Guy's Hospital last year was £1083; the spirit account, £376. Total £1459. At St. Thomas's, the wine account was £629; spirit account, £521. Total, £1150; or £2609 in one year in the Borough Hospitals alone. If the grape disease prove useful in directing inquiries to the discovery of a cheaper, and a not less efficient cordial than wine, it may prove of ultimate value not only to these Institutions, but to all classes of the sick poor throughout the country. Let our Australian and Cape colonists bestir themselves.

THE WEEK.

It is not often that we direct special attention to the communications that appear in our columns, but we cannot pass over one that appeared last week, and another we publish to-day, without a word of congratulation on the progress we are making in practical surgery and scientific medicine. Mr. Little's case of Subclavian Aneurism, cured by the method of manipulating the sac and displacing its fibrinous contents as suggested and practised by Mr. Fergusson, and first noticed in this Journal, is of peculiar importance. The aneurism was a most unpromising one, large and soft, and its coverings so inflamed that bursting was apprehended; yet the complete cure effected by manipulation encourages the hope that this method of treatment may not only prove effectual in cases where the ligature or compression are inapplicable, but that some internal aneurisms may be treated successfully in the same manner. Dr. Ranke's experiments, showing how remarkably quinine diminishes the excretion of uric acid, throw a new light on the pathology of intermittent fevers. We trust that the accuracy of the results at which he has arrived will be tested by other observers without delay.

On the 10th of last February there appeared in the *Moniteur des Hôpitaux* a *feuilleton* from the pen of Dr. Joulin, in which the recommendation of "vulvar confrication" in a work on hysteria by M. Briquet was somewhat playfully criticised. This, it seems, has given serious umbrage to the guardians of the public morals in France; and Dr. Joulin, the author of the article, and M. de Castelnau, the editor of the journal,

have been prosecuted in the correctional police-court. They were condemned as guilty of an outrage against public morals; and having appealed, the condemnation has been confirmed, the sentence being for each, imprisonment for a month and a fine of 300 francs, each paying his share of the costs. We have read the article in question, and, although believing it to err against the canons of good taste, we can find no justification in it—appearing, as it does, in a purely Medical journal—for the arbitrary proceedings that have been taken. In fact, we cannot but believe that the reason assigned by the prosecution is a mere pretext.

A return has been published very recently, by which it appears that the sum of £144,855 10s. 1d. was paid in salaries to the Poor-law Medical officers in the year 1855, exclusive of the sums paid for extra-medical, midwifery, and vaccination fees; and in a majority of cases the salaries of the workhouse Medical officers have been also wholly excluded. Upwards of £40,000 annually is expended in salaries to public vaccinators. The salaries of the Medical officers in prisons, gaols, and reformatories cannot be less than £50,000; while the attendance on the police, the salaries of Officers of Health, and those paid to Medical men in other civil departments of the public service, may be very fairly estimated at £50,000 per annum in addition. By the same return it also appears that in the year 1855 there were 3197 district Medical officers employed by the Poor-law Guardians; and as the Medical appointments to prisons and other public institutions are in general filled by the same persons who hold Poor-law appointments, it may be inferred that the whole of the civil public Medical service of the country is at present performed by about 3500 members of the Medical profession—all of whom, with very few exceptions, are also engaged in private practice. The bearing of these facts upon the establishment of a Civil Service Medical Department must not be overlooked.

We have received a copy of some forms of certificates, which have been issued by the Secretary of State for the Home Department to the various clerks to the Justices in the county of Nottingham, on the subject of the expenses to be allowed to witnesses who are called upon to give evidence in Courts of Justice. From a perusal of the documents, we are led to believe that some change is contemplated in the mode of remunerating witnesses, Medical men of course included; for we find that a fixed sum is not henceforth to be granted for the day's attendance of a particular witness, but that he is to be remunerated according to the number of *hours* he may be actually engaged; so that, although it is contemplated to make the sum of one guinea *per diem* the basis of the payment, yet only a proportional fraction of that sum will be granted when the witness has not been detained more than a portion of the day in Court. As the new scheme has not yet come into operation, and as we find no distinct mention of Medical witnesses in the draft documents which have been forwarded to us, we are not sure that so shabby a proceeding is really contemplated towards the members of our Profession; and if there be any intention of the kind, we sincerely hope that Sir George Grey will pause before he puts it into execution. The sum of one guinea per day is quite small enough for the sacrifices which a Medical man is compelled to make in attending Courts of Justice. In the case of many Medical men it is totally inadequate; and to fractionize this sum according to the number of hours in which the witness may be actually detained, is a most insulting proceeding, which we are unwilling to believe will ever be adopted.

The sitting of the House of Commons next Thursday will be particularly interesting to Medical men. The fate of two Medical Reform Bills will be then decided. On Mr. Headlam moving the second reading of the Bill of the Corporations, Lord Elcho will move that it be read "this day six months." This is, of course, preparatory to bringing on the Bill of the Universities. Many who profess to be well informed on the subject are confident that Lord Elcho will be successful, and assert that he will receive a modified support from Government, or rather a direct support from some members of the Government. If so, this will be quite enough to defeat the adverse Bill, notwithstanding the support promised by Irish members to Mr. Headlam in reply to a circular addressed to them by the Irish Corporations. We have said quite enough as to the comparative merits and shortcomings of the two Bills, and do not think it advisable to take up our space by reprinting measures which may never become law; but those curious in the matter may refer, with advantage, to the letter of "A University Graduate" published in another column, in which they will find the objections urged by the supporters of Lord Elcho's Bill to that of Mr. Headlam very clearly set forth.

The well-known lines in Coleridge's "Ancient Mariner,"

"Water, Water, everywhere,
But not a drop to drink,"

might be very well parodied in the song of the "Modern Druggist,"

"Poison, Poison, everywhere,
A penny pay, and drink."

Since last week only we have to record the death of a man, forty years old, at Selby, who was served with laudanum in mistake for Godfrey's Cordial, by a Mrs. Whitehead, who has been committed to York to take her trial for manslaughter. Then comes the death of a butcher, named James Lilley, who sent out a boy for "threepennyworth of laudanum," procured it without difficulty, took it, and died. Thirdly, we have a case at Louth, where a child named Charles Houseman was also poisoned by laudanum. The newspaper report says, "The man who sold the poison was a grocer, who keeps it for the 'accommodation' of the public, but does not even label the bottles. The coroner said to this man,—'If death had resulted to an adult person you would have been placed in the most perilous position. Not only have you neglected to place a label on the phial describing the contents as poison, but you allowed it to go out of your shop with a label upon it describing the contents to be 'Dalby's Carminative,' a harmless mixture. You see it is now upon the bottle. In this case, however, the deceased child was so young that it could not read, but had it been otherwise you would have been placed in an awful position. I would recommend you to be careful.' The jury, after a short consultation, returned a verdict of 'Accidental death.'" The coroner's remarks in this case are curious enough; but the lesson these deaths teach is the necessity for urging on the bill for the restriction of the sale of poisons now before parliament.

The absence of any member of the governing bodies of any of the Medical Corporations from the public meeting of the "Poor-law Medical Officers of England and Wales, and of the Profession generally," very naturally called forth an expression of surprise from Mr. Brady. When the Councils of our Colleges meet together privately and frame a Medical Reform Bill, they put it forth marked "secret and confidential," as the bill of the Profession. When representatives of the great working body of the Profession meet together publicly to obtain redress for public grievances, the Dii Majores of the Colleges and Halls studiously refrain from offering either sympathy or

assistance. It is easy for men of five or six thousand a year to say, "It is all the fault of the Poor-law Surgeons themselves. Why do they work for a penny a visit?" forgetting that to a man of two or three hundred a year with a wife and six children, even the miserable stipend of the union is of some importance. Still, "Heaven helps those who help themselves," and if the Poor-law Medical Officers work on, and stand by each other, they are certain to obtain any just and reasonable demand. The people of England will have proper medical attendance for the sick poor, and will not object to pay for it on fair and moderate terms.

TESTIMONIAL TO WILLIAM NEWNHAM, ESQ.—A short time ago we had the pleasure of announcing that a subscription had been set on foot, with a view of presenting to Mrs. Newnham a portrait of her husband, in honour of his services to the Medical Benevolent Fund. On Tuesday last, at the monthly meeting of the Committee of the Medical Benevolent Fund, the portrait was presented by the President, Sir James Clarke, to Mr. Newnham, who stood as proxy for Mrs. Newnham. Sir James said:—"Mr. Newnham, the pleasing duty has been assigned to me, as President of the Medical Fund, to request, on the part of the Council and members of the Fund, that you will accept and present this Portrait of yourself to Mrs. Newnham, as a testimony of the esteem and affectionate regard which they entertain for her husband. The members, and especially the Council, who have been the chief witnesses of your energetic and untiring exertions in the cause of the Fund, are deeply sensible how much of its success and usefulness has been the result of your labours. If the late eminent Dr. Baron had the honour of originating the Medical Benevolent Fund, you have assuredly the credit of having been its architect, of having raised it to its present prosperous condition. The annual income when you first took the management of the Fund was under a hundred a year, while last year it was upwards of six hundred! To you, therefore, Mr. Newnham, the Profession is indebted for the great benefits it has derived from the charity. Although we cannot now look for a continuance of the exertions you have hitherto made, we trust that you may still be spared years of usefulness in the exercise of that active benevolence which is the prominent character of your nature, and which has hitherto been so efficiently exerted in the cause of the widow and the orphan." In replying to Sir James Clarke's address, Mr. Newnham expressed his heartfelt satisfaction at this testimony of the esteem of his friends. He referred to years gone by, when it had been his privilege to throw his whole soul into the work; and, although he was now unequal to the same amount of devotion, expressed the zeal with which he still contemplated the Medical Benevolent Fund, and pledged himself to devote the remaining energies of declining life to its support. He also stated Mrs. Newnham's gratification at this testimony of her husband's usefulness, and added that the picture had been bequeathed as an heirloom for ever to her second son, who was also a trustee of the Fund. The following inscription on the frame of the picture briefly records the motives of the donors and the merits of the receiver:—"This Portrait of William Newnham, Esq., is presented to Mrs. Newnham, by numerous subscribers to the Medical Benevolent Fund, as a testimonial of the high respect, affection, and gratitude entertained by them for her most excellent husband, to whose disinterested, noble, and indefatigable exertions for many years, as Secretary, Treasurer, and General Manager, that charity is indebted for its present great success and extensive usefulness. May, 1857." The subscriptions, having exceeded the price of the portrait, allowed the Committee to present with it, to Mr. Newnham himself, a silver Inkstand, bearing an inscription indicative of the occasion and the cause of its presentation. There can exist but one feeling of approval among the members of the Profession, of this proceeding on the part of the Medical Benevolent Fund, as well as of gratitude for the admirable and most effective exertions of the gentleman whose merits have called it forth. May he live many years to enjoy the blessings which a life like his must bring with it!

REPORTS

ON

THE RELATIONS OF FOOD AND DISEASE.

No. VI.

MODERN FARMING, UNWHOLESOME MEAT,
AND THE REMEDY.

Our object has been for some time past, to fix the attention, especially of our sanitary reformers and engineers engaged in the consideration of the question of town drainage, upon the all-important point of an economical use of the sewage. It is well known that the tendency of most efforts has been efficiently to purify the towns at the expense of the country, by condemning to utter waste that which in one shape or other has been drawn from the soil for the sustenance of the population, instead of returning it to its natural destination. This, to say the least of it, is unfair usage and suicidal policy. On the one hand, as our numbers increase and our notions of political economy change under the clamour of the manufacturing interest, we demand of the farmer more meat and cheaper bread. It is of course his business to meet that demand, and he is getting reconciled to the free-trade terms on which it is made. But on the other hand, we deny him the simple essentials for carrying out his part of the contract, and we think that, in all fairness, he may now retort on his Manchester friends some of their old charges. Who is acting absurdly now? Where do we find now the ignorance and want of reason? You cannot throw away your riches and have them too. Farmers are not Pharaoh's bondsmen. They cannot grow corn without dung, and the cycle of metamorphoses must be complete to be continuous. The inorganic must pass into the organic of low type. The higher forms of existence must use the intermediate ones as aliment. But they have no right to stop there. Appropriation is not justice. The earth is not theirs to exhaust. That which is taken from it ought to be restored to it; and it would be, if our town-refuse were properly dealt with. This is all the farmer asks to enable him to keep in sufficient activity his section of the series of natural changes, and so to feed the hungry. He may also with reason complain if science does not determine the right way of doing this. He indicates the want, and specifies the sources from which his wants may be supplied. Science failing him and offering only nostrums, he takes his own counsel, and does his work in the best and cheapest way he can; but, as is universally admitted, to the gradual though certain deterioration of the soil, and after a fashion which victimises, at any rate, the flesh-eating part of the community. How that happens in the furnishing forth of young beasts for slaughtering, we pointed out in general terms in a recent article.

We have found both amusement and satisfaction in observing the spirit in which that article has been received by our agricultural correspondents—but more satisfaction than mere amusement. This kind of intercourse brings out proof of the improvement that is rapidly taking place in the tone of feeling and standard of intellectual attainments of that class of men. As a rule, we have been assured that our representations are in accordance with the opinions of the more intelligent, and have met with expressions of gratulation that we should be inclined to examine into farm proceedings upon the broad basis of physiological principles, and be willing to make reasonable and profitable suggestions as to the treatment of stock. We have no other aim than that of the general good; and it is a strong inducement to continued effort when we see that our motives meet with a just estimate. In one instance only have our intentions been misinterpreted and our arguments contradicted—but without disproof. The manager of the *Dorset County Chronicle* boasts of being an agricultural editor, and he does both. He thinks that our object is to "obstruct profitable farming, and to rouse public indignation against the vigorous prosecution of their business on the part of farmers." Who can he be? Is he a man of the nineteenth century? or is he the ghost of some primeval editor, echoing the trash that was popular when men wore home-spun, and would have been afraid to trust either themselves or their beasts in locomotion to the scientific care of a Stephenson or a Peto? We are acquainted with Dorset farmers who know better than this; who know, as well as we can tell them, that men occupied in one way cannot obstruct the work of others

without injuring themselves, and who are aware that for the well-being of the whole we must all act in concert; and that this is our policy. He contends also, that because veal is good, young pseudo-beef must be good too; and that, seeing we now sometimes extravagantly eat veal as a luxury, we ought never to have real beef. On the contrary, we maintain that if there is to be any exclusiveness at all in the matter, we should never eat veal. Again, to show the kind of man who stands out alone in finding fault with us, we may mention that he argues "that though an animal may close up and die of overgrowth of fat, that is not the sort of physical infirmity which would render it unfit for food, because fat itself is never diseased." The logic of our Dorset critic is as bad as his beef must have been when, as a farmer, he fattened his beasts till they "closed up and died."

We pass on, however, from the consideration of the fact that modern meat is unavoidably of inferior quality as regards nutritive power, from the circumstance of farmers being driven to manufacture manure for themselves, and so to use calf-bullocks for fattening as one of the cheapest modes of doing so, to some other points of interest indirectly connected with the subject of town drainage. About 500,000 bullocks are annually slaughtered in London, and a vast number more must be consumed in the provincial towns and country districts. Whatever the aggregate number may be, it represents only a portion, not one half, of the calves born or imported. What becomes of the other half? In due time, the greater part is turned into delicate veal. The weak or sickly calves die or are killed very early, because they would not pay for keeping. Among the better class of farmers, they are looked upon as little better than dog's meat;—but why speculate upon the destiny of those innocents which do not go to the dogs? It is beyond our control; and being helpless we may as well stay in the bliss of ignorance. In France, it would appear that about one-half of the ox kind die as veal. In England, probably not one-third of the calves can be killed by the butchers. The subsequent career of the survivors is a chequered one. The home-breds are generally pretty well attended to, and are early fattened for killing. But the great mass of young beasts raised in the breeding districts are shifted about the country till sold, and often undergo great hardships. Their condition when considered ready for fattening may be judged of by the fact, told us by a gentleman of great experience, that out of a lot of forty beasts bought in open market, he often finds it necessary to draught off as many as five-and-twenty, from their showing some untoward symptoms as soon as they get under their new regimen. Such rejected ones are resold to an inferior class of dealers, who either keep them a little while under treatment and then drive them again to market, or kill them at once and send away the carcasses to London, or other large towns, or for shipping. The remainder when they fall into the hands of men of capital have now a short life and a merry one, and generally run on to the end of it without let or hindrance from disease; and they make the beef of which those of us who are old enough complain by comparison. In the yards of the middle class and small farmers the risks and results are different, and it is the accumulated gatherings from these minor sources that furnish our main supply. To the condition of the cattle, then, in these hands we have chiefly to look. Instead, however, of hazarding any broad, sweeping assertions which it would be difficult perhaps to maintain as equally good for all districts, and which, though essentially true enough, might be contradicted by some individual, exceptional experience, and so made to appear as unfair or prejudiced, we shall confine ourselves to illustrative narratives given us this week by the first three persons to whom we applied for information on the subject.

A Fellow of the College of Surgeons, who has carried on an extensive practice in an agricultural district in one of the eastern counties for five-and-thirty years, in speaking of the state of the yards and farm premises which he has been in the habit of visiting, describes them as inevitably productive of disease. He represents the arrangements as bad, the drainage as bad, and the shelter as insufficient. The cattle yards and sheds are brought as near to the dwelling as possible, in order that they may be conveniently overlooked. The drainage, if any, is by the surface, into the nearest pond or ditch; and the protection from wind and weather is of a kind which conduces very little to the comfort or safety of animals in a forced state of quietude and repletion.

One of the most recent cases, among many others in his practice, demonstrating the effects of such a combination of noxious circumstances, is that of a family of which five members were, a short time ago, ill at once with a malignant form of fever. Three of those five died, and the whole household suffered in one way or other. Now, here the house and cattle yards were contiguous, and the drainage a mere pretence. The yards were filled with soddened masses of excrement and straw. In them were kept several head of cattle, and man and beast lived in the same atmosphere. To what extent the cattle were injured we do not learn; but as the bad and fatal effects upon human beings were so striking, we cannot doubt that, if proper inquiry had been made, similar consequences, as in other parallel cases, would have been heard of with regard to them. Naturally enough, after such a triple warning, the premises were remodelled, drains laid down, and the clean separated from the unclean. The family recovered health, and have remained well since.

Our next instance comes from the lips of a surveyor, who has been intrusted with the readjustment of the yards and buildings of a farmer, whose family has for years been tormented with a low form of disease, and whose cattle have never done well. Everything is so bad in detail that common sense dictates alteration. This last season matters have become aggravated. Some of the people have been "low and nervous," another tubercular, some ill with typhoid fever, and no less than four bullocks out of a very small number, showing symptoms of lung disease, were killed on the spot, the carcasses dressed and sent away for sale. The effect of the improvements now in progress remains to be seen.

A third case of the like kind was told us by a chemist, whose trade is principally made up of the sale of cattle medicines, and whose customers are mostly farmers. The last person who went out of the shop as we called was a man whose cattle yards, in the hollowed-out, boggy, filthy state that farmers of his stamp like to see them, thinking, according to a local saying, that "where there's muck there's money," come up to the very windows of his dwelling. They are cleaned out once a-year, and are occupied uninterruptedly by stock of various kinds. What is the consequence? He himself, his wife, and daughters who live with him, are always ailing and rushing to a quack. He makes up his mind to a yearly loss of some of his beasts by death; and it happens as he expects. "Ill luck never leaves him." This spring, four nearly fat bullocks fall ill—disease, typhoid fever, with pleuro-pneumonia. He gives them the usual remedy—a dose of Glauber's salts, with ginger. They get worse. He abuses them as if they were doing him an injustice, and sends for the leech, who, of course, orders them to be killed; and they take their last journey per luggage-train. Now these three are not isolated cases. They are the first that came to hand on a given day. Every new informant repeats similar tales. The veterinary surgeon is generally one of the busiest and most thriving men in his neighbourhood. He is by no means a rarity either; and, as we have witnessed, often looks very complacently at the parish doctor, as he dashes by him with his fast-trotting cob and sulky. One of these practitioners, who has for many years had ample opportunity of watching the trial and results of various modes of grazing, confirms our statements, and asserts that there is a marked constitutional change for the worse in the cattle which are now bred. He finds that, though improved in form, they are less vigorous than they were twenty years ago, have a distinct hereditary tendency to diseases of the respiratory organs, become more easily affected by the depressing influences of cold and wet, and cannot bear depletion and purging when ill, as their progenitors used. The diseases which he is now called upon to treat are of a lower type, and not so miscellaneous as they were. Those of the alimentary organs and of the brain do not prevail so much. He now not uncommonly meets with cancer, especially of the tongue, parotid gland, and of the upper maxillary bones after blows. Who does not see the import of all this? The majority of farmers are familiar with these truths, and deplore them as evils. But they are seldom free agents. They pay heavy rents, and are crippled by vexatious leases, or cramped in their exertions by having none; and the landlords are often too poor to keep up the needful repairs, and much less able to alter or meliorate. So the yards grow worse from year to year, the buildings more rotten, the soil about the premises more saturated with what ought to be in the fields, and the wells and water more im-

pure. Manure must be forthcoming in some shape to make the crops pay. Young bullocks form a profitable means of procuring it, even with the hindrances that we have glanced at. The probable loss from typhoid and tubercular beasts becomes a regular item in the calculations of the grazier. This, in some farms, amounts to as much as one-fourth of the whole number purchased. We have to put up with indifferent beef even at the best tables, and we know that every farm sends out its quota of meat that must be sold, but that never ought to be eaten. And why? Because the farmer wants the contents of our cesspools, and cannot get them. We prefer flushing away all into the Thames, or the Mersey, or the Severn. End, this anomaly, and let us solve the problem of the proper collection and distribution of the thing that stinks in the nostrils of our Officers of Health. Our farmers will then cease to grow corn only at the expense of their cattle, pasture-land would again become profitable, and we should once more eat real, wholesome beef.

REVIEWS.

Paralysis and Neuralgia; their Prevention and Cure: with Observations on the Skin. By HENRY TWEEDY, M.D. Pp. 55. Dublin: 1857.

At the present day, when too many Practitioners, by their unworthy acts, degrade the noble profession of medicine into the "vilest of trades;" when, to contemplate the "nummos in arcâ" is the main, if not the sole object of several whose education and calling should point them to higher ends; when perhaps the "recte si possis," but certainly the "quocunque modo," is a maxim too commonly acted on; it is consolatory to find a body to whom belongs the responsibility of watching with jealous eye over the honour and dignity of their order, coming forward boldly and fearlessly in the discharge of their solemn duty, and for the vindication of the respectability of the class intrusted to their care. We have been led into this train of thought by a perusal of the pamphlet before us, and by some recent proceedings of the King and Queen's College of Physicians in Ireland, the particulars of which we shall briefly sketch for the information of our readers.

It is provided by a Bye-law of the College, that "Any member of the College who is guilty of unprofessional conduct, either by advertising or other practices unbecoming the honourable profession of Physic, shall be placed under the censure of the College." It is also ordered by another Bye-law, that "No member of the College shall consult with, or otherwise sanction, any other member who is under censure; nor consult with, or sanction professionally any person who, by advertisement or other unworthy means, endeavours to obtain practice, or to attract public notice."

The pamphlet recently published by Dr. Tweedy, a Licentiate of the College, having violated the former of the foregoing bye-laws, the author was, at a stated meeting, placed under the censure of the College.

To enable our readers to judge of the merits of the case in question, we shall quote a few extracts from the work before us.

1. That it is avowedly written for the public and general reader, is shown by the following passages:—

"To the *public*, for whom this volume is intended."—P. vi. "The following practical observations are addressed to the *general reader*, to whom is it hoped they may prove useful."—P. 10. "Whilst thus enforcing the advantages to be derived from galvanism when used by a well-qualified Physician, we cannot too strongly caution the *public* against the indiscriminate use of this powerful agent by inexperienced hands."—P. 33. "For the information of the *general reader*."—P.

2. The usefulness of medicine is depreciated:—

"As thousands die from over-eating for one who dies from utter starvation, so it is equally true that thousands fall sacrifices to taking too much medicine for one who falls a victim to getting none at all."—P. 11. "I am, in the exercise of conscience, compelled to admit that, in my opinion, their *abuse* [of mercury, bleeding, purgative medicines, &c.] has been instrumental in causing and rendering incurable, twenty, it might perhaps be no exaggeration to say one hundred, cases of the above diseases, for one which their use is entitled to the credit of having cured."—P. 12.

3. On the subject of dry cupping the author says:—

"Having performed the operation at least one thousand times in the upper ranks of life, and witnessed its great utility," &c. "It moreover has these great advantages above most remedies used by Physicians and Surgeons, viz., it is *painless, bloodless, harmless*."—P. 27. "Little has been written upon the subject; few, even amongst the best informed Physicians and Surgeons, appreciate it as it deserves."—P. 29.

To continue these quotations would, however, extend this article greatly beyond its reasonable limits; we shall, therefore, present our readers with a few short specimens of the writer's powers of self-laudation.

The means used by the author "for the prevention and cure of paralytic and neuralgic disease are entirely the result of personal observation and experience." "They are certainly (and with great thankfulness be it mentioned) entitled to the twofold credit—

"1. Of having proved useful in a large number of cases;

"2. Of not having been found in a single instance injurious."—P. 10.

"Having never, at least for eight or nine years, in the providence of God, seen one case of scarlatina terminate fatally, when the treatment I invariably pursue was adopted."—P. 19.

The value of the author's observations on dry cupping "are the results, not of what he has heard or read, but of what he has been witnessing and testing for upwards of fifteen years."

"Diseases have been cured in a few hours which were expected to have lasted days—others have disappeared in a few days, which, under ordinary circumstances, would have occupied weeks to remove."—P. 39.

"The measure of success which has followed this practice has been very remarkable."—P. 54.

A few hints to the public to employ the author are gently thrown out:—

"But thus much may with truth and confidence be affirmed, that their joint influence [dry cupping, galvanism, and vapour-baths; during the application for paralysis of the second means named, the patient and Physician should, where practicable, reside in the same house, p. 32] does, through Divine mercy, possess a power in preventing, relieving, controlling, and curing disease to an extent never before known in the history of medicine."—P. 11.

The author's "enema apparatus," "if cautiously used, under proper direction, will answer all the best purposes of medicines, while none of their manifold evil consequences need be apprehended."—P. 14.

"Many of the persons cured and benefitted will gladly avail themselves of any opportunity of bearing testimony to the power and efficacy of this instrument [galvanism] which God has raised up for the removal of suffering."—P. 33.

The author, in contravention to the rules of the College, practises pharmacy; he "has at all times at hand a supply of portable medicine, the effect of which, when taken, is to intensify cutaneous action; so that one avoidable moment is not lost in endeavouring to make an early impression on disease, and thus arrest it in its incipency."—P. 54.

We regret to have to notice the frequent irreverent mention of the Deity in the pages of this emanation from the pen of a licentiate of the King and Queen's College of Physicians in Ireland. We may add, that we have reason to know that the College, in passing the censure upon him, did so merely in reference to his unprofessional conduct, and did not express any opinion whatever on the treatment recommended.

To the other Medical bodies we would, in conclusion, simply say, "Go and do likewise." It is but justice to the King and Queen's College to state that this is not the first occasion on which it has interfered to uphold the honour of the Medical Profession; and we trust that the English and Scotch Corporations will not be slow to follow the example. Instances of unprofessional conduct are unfortunately but too common, and are doubtless more frequent than they would be if our Councils exercised the powers with which they are entrusted with something like vigour.

A Catechism of the Medicine and Surgery of the Eye and Ear. For the Clinical Use of Hospital Students. By T. WHARTON JONES, F.R.S. 18mo. Pp. 131. London: 1857.

IN this little work, Mr. Wharton Jones has reduced to the form of question and answer the essential points of practice in the diseases of the eye and ear. It is addressed principally to those who are pursuing their studies in an Hospital, but will be found an excellent manual for practitioners. The whole work is of the most practical turn, the style clear and condensed, and the remedies advised those which long experience has shown to be effectual.

The parallel which is drawn between the diseases of the eye and those of the ear is extremely good, and will interest the general pathologist, as well as prove instructive to the surgical practitioner.

BOOK NEWS.

Dr. Edwin Lee, who is well known for his works on the peculiarities of watering-places on the continent, has presented the public with *Notices sur Hyères et Cannes*, in which he describes these two French towns, and, without exaggerating their beauties or their salubrity, he points out the nature of the climate presented by each, and the class of maladies which a residence there is likely to alleviate. The style is popular and amusing, and contains a large amount of information for the traveller in quest of health or pleasure in the maritime parts of Provence.—*A Treatise on the Cure of Stammering*, by James Hunt, Ph. D., has reached a third edition, and is written for the purpose of recommending a plan of treatment adopted in this affection by the late Mr. Hunt. The nature of the treatment is not fully explained, but we have a copious biography of Mr. Hunt, and fourteen pages of testimonials as to the efficacy of his system. As a scientific treatise the book is beneath criticism.—Dr. Gull has reprinted in a separate brochure some *Cases of Paraplegia*, which appeared as an article in a late number of the *Guy's Hospital Reports*. The cases are carefully recorded, and are illustrated by some well-executed plates.—The *Sixth Annual Report of the Wilts County Asylum, Devizes*, gives a satisfactory account of the condition of that establishment; and the Commissioners in Lunacy have expressed their approbation of the manner in which the patients are treated. The Asylum is so full that it is in contemplation to make some addition to the female department, which is at present too much crowded.—Mr. J. C. Clendon has published, in the form of a pamphlet, the letters and papers lately published on the recent Dental movement, together with some remarks on the present anomalous state of the Dental Profession. Mr. Clendon is decidedly opposed to the establishment of a Dental College, and considers that all who practise as dentists should be educated surgeons, and should pass a surgical examination. He is also opposed to the proposition that the College of Surgeons should institute a special and inferior examination for surgeon-dentists.—Dr. J. C. Hall has reprinted from one of our contemporaries, and published in a pamphlet, some remarks *On the Prevention and Treatment of the Sheffield Grinder's Disease*. In this essay Dr. Hall enters at length into the history of the Sheffield manufactures, and details the symptoms, progress, and termination of the disease which is peculiar to the grinders, and which is caused by the inhalation of the particles of dust into the lungs. Several illustrations are given of the appearances presented by the lungs in fatal cases, and by the sputa during life. One portion of the sputa is represented as containing sarcina ventricula, the discovery of which in the expectoration Dr. Hall claims for himself.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—At the meeting of June 9th, the following gentlemen will be balloted for as Fellows:—Dr. William Brinton, of Brook-street, and Mr. John George Robinson, of Exminster.

ROYAL MEDICAL BENEVOLENT COLLEGE. At the election on the 21st instant six pensioners and six foundation scholars were elected. Appended are the names of the successful candidates, and the number of votes obtained:—*Pensioners*.—Mrs. Casson, 3926; Mrs. Yonge, 3727; Dr. R. W. Scott, 3579; Mrs. Wright, 3481; Mrs. Little, 3358; Mrs. Aylward, 2914. *Foundation Scholars*.—John White Kettle, 4157; Horace Joseph Palmer, 3982; Frederick Cooper, 3960; William Horace Eccles, 3857; George W. A. Salmon, 3466; Frederick Hugh Short, 3352.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

STATISTICS OF PLACENTA PRÆVIA.

By Dr. SCHWARZ.

Dr. Schwarz, of Fulda, in Hesse-Cassel, having heard the frequency of placenta prævia stated in a medical society as far greater than he had hitherto believed it to be, examined in reference to this point the official returns made by the Hesse practitioners. These were supplied by 150 accoucheurs, during a period of 20 years, *i. e.* from 1835 to 1854 inclusive. They related to 519,328 births, and among these were only 332 cases of placenta prævia—the numbers varying from 8 to 28 per annum. Of these 332 cases, 246 women recovered and 86 died: 251 children were born dead, and 85 were born living. In 40 instances the women were primiparous and in 292 pluriparous. Podalic version was performed in 259 cases, and cephalic version in 7; while in 23 instances the children were removed by the forceps, in 6 by craniotomy, and in 13 by post-mortem Cæsarean section. In 8 instances the placenta was removed, and in 16 the plug was resorted to.—*Monatsschrift für Geburtskunde*. Band viii. p. 108.

PREMATURE LABOUR IN A CASE OF CAULIFLOWER EXCRESCENCE.

By Dr. WALLSTEIN.

H., aged 40, was the mother of six living children, and now six months gone with her seventh, seemed of healthy appearance. During a month she had suffered from abundant, clear, inodorous, watery discharges from the vagina, which became each day more copious, but which were unaccompanied by pain or excoriation. Her strength had considerably diminished, and ten hours before the author saw her labour pains had set in. On examination there was found springing from the anterior lip of the os uteri a tumour the size of an orange, presenting all the tangible character of cauliflower excrescence. Seen through the speculum it was the colour of a ripe strawberry. Neither hæmorrhage or pain was produced by the examination. The posterior lip of the os uteri could be got at only with difficulty, and although uniformly firmer than in the natural state, it had undergone no degeneration. The liquor amnii had been discharged just before the author's arrival, and he was with difficulty enabled to introduce a finger within the os uteri so as to feel a foetal head. He tried during several hours to effect dilatation of the os by compresses and various other means, but not succeeding, and fearing rupture of the uterus, he resolved to try the effect of incisions. With considerable difficulty he passed a Pott's knife up and made two incisions three or four lines in depth in the posterior lip of the os uteri. There was little hæmorrhage and the edges of the incisions expanded in a favourable manner. The head presented by its vertex, but owing to the enfeebled state of the woman the pains were not sufficiently expulsive. One fainting fit followed another, and it was resolved to apply the forceps. The tumour, owing to the continuous congestion, had increased a third in size, so that the application of Busch's delicate forceps was even a matter of great difficulty. The head was not readily drawn down, while the tumour, resembling a dark-red colossal fist, rolled down between the labia during each traction; and at last, as the child's body passed, it was extruded beyond the external parts. The tumour, however, immediately receded, and no considerable hæmorrhage followed. The child, a six months' one, lived ten minutes. The placenta did not come away at once, although there were frequent pains; and during the author's temporary absence from the room, the midwife, in endeavouring to remove it, broke the funis off near its insertion. Next day the tumour was not larger than heretofore, and no inflammatory reaction had followed. At the end of forty hours the placenta was felt just within the os uteri and removed, its structure being normal. The lochia and secretion of milk pursued a regular course, and nothing abnormal occurred until the eighth day. At this time the copious watery discharges began to return, and in the course of their continuance were frequently accompanied by hæmorrhage, so that the patient's strength became greatly reduced. By the employment of good diet and tonics her general health greatly improved; and as the disease had as yet made no greater ex-

tension, the author proposed its removal. The patient feeling so much better refused consent.

At the end of four months the author was again called to her, and she now presented a hopeless appearance. She had, during the last two months, suffered from severe and frequent hæmorrhage. The growth had become softer in texture and bled on examination. It had not extended much towards the vagina, but had implicated a portion of the body of the uterus, although the posterior lip was still intact. She died exhausted in three or four days, and no post-mortem was allowed. The author believes that the proper treatment of this case would have been the amputation of the cervix just prior to delivery.—*Monatschrift für Geburtskunde*. Band. viii. pp. 185-193.

EXCERPTA MINORA.

Gorged Leeches.—Leeches having been sold in Paris containing a considerable quantity of blood, a decree has recently been published on the subject. By this it is admitted that leeches which have never been applied may still contain a certain portion of blood, owing to the practice that now prevails of feeding them with blood in the reservoirs, but it is decreed that all leeches exhibiting more than 15 per cent. of their weight of this are to be seized. The examiners are ordered to take promiscuously a certain number and weigh them, after well drying them. They are then to be placed in a tepid saline solution for two minutes, the blood they contain pressed out, and weighed again. If the difference is more than 15 per cent. they are declared to be sophisticated.—*Journal de Chimie Méd.*, 1857. Pp. 238, 242.

Chloroform in Placenta Incarcerata.—Dr. Wichmann relates a case to which he was called of considerable uterine hæmorrhage occurring two hours after the birth of the child. On examination, the half-separated placenta was found to be incarcerated by a strictured condition of the lower third of the body of the uterus. Opium and belladonna had been employed without avail, both externally and internally, but the uterine spasm ceased in a quarter of an hour after the inspiration of ʒij. of chloroform.—*Berlin Zeitung*, 1857. No. X.

Assafœtida in Scorbatic Ulceration of the Fauces.—Dr. Piwowarow, chief Physician of the Military Hospital at Poltawa, reports that of all the means he has employed in scorbutic ulceration of the throat, assafœtida has proved of the most marked utility, rapid healing taking place, even when the destruction has been considerable. He mixes it into pills with ext. taraxac., and gives from five to eight (but does not state the weight) night and morning; or the following electuary may be given four times a day in teaspoonful doses:—R. Assafœt., ext. tarax. āā ʒij., oxym. simpl. ʒj. M.—*Berlin Zeitung*, 1857. No. XI.

Garlic smell of Arsenic.—Dr. A. Vogel states that this may be perceived remarkably where even the smallest quantity of arsenic is present, by rubbing intimately together very fine charcoal powder, a very diluted spirituous solution of shellac, and the arsenious acid. It is then exposed to the action of the blow-pipe. Small bars formed from this paste constitute a very simple means of exhibiting the smell in the lecture-room.—*Buchner's Repert.* 1857, No. 3.

Nitrate of Ammonia in Rain-water.—Dr. Landerer states that in Greece, and especially in Attica, tremendous storms of rain and hail, accompanied by thunder and lightning, occasionally occur; and, though they are of very short duration, the quantity of rain discharged is immense. He has examined this, and distinctly found nitrate of ammonia in the precipitate left after evaporating it, although none has been detectable in the water proceeding from the melted hailstones.—*Buchner's Repert.* 1857, page 130.

Sesquichloride of Iron in Hæmorrhages.—Dr. Herzfelder quite confirms the good accounts of this given by the French Practitioners, as a most valuable agent in various kinds of internal hæmorrhage, and far superior to ice, alum, tannin, etc. He dissolves a scruple in 4 ounces of water, and gives a spoonful every quarter or half hour. Dr. Raith, confirming this account, and especially as regards uterine hæmorrhages, prefers the tinct. ferri sesquichl., as the watery solution is very nauseous.—*Buchner's Repert.* 1857, No. 3.

Treatment of Boils.—Dr. Winslow states that he has found his treatment remarkably efficacious in the various parts of the world he has tried it in. It consists in bleeding the patient and giving no medicine. He prescribes the remedy with as much confidence as he gives quinine in ague, and that

whether the boil be but a slight one, or assuming a carbuncular form.—*Boston Journal*, Feb., p. 73.

Iodate of Potassium in Affections of the Mouth.—Induced by the great success that has attended the employment of chlorate of potass in affections of the mouth, MM. Demarquay and Gustin have tried the efficacy of the iodate of potassium in numerous cases of diphtheritis and gangrenous stomatitis. The success has been considerable, and that in some cases in which the chlorate has failed. The dose employed was from four to eight grains.—*Moniteur des Hôpitaux*, 1857, No. 46.

GENERAL CORRESPONDENCE.

THE MEDICAL REFORM BILLS AND THE SCOTCH UNIVERSITIES.

[To the Editor of the Medical Times and Gazette.]

SIR,—While, as you justly observe, "Lord Elcho's Bill is the Bill of the Universities, especially the Scotch Universities;" and that "Mr. Headlam's claims to be the Bill of the whole Profession, represented by the heads of the different Corporations," it appears to me that Mr. Headlam, though probably without intention, has somewhat slighted the Scotch Universities, and so increased the weight of Lord Elcho's opposition. Thus everybody in England and Ireland is privileged to choose one of the council, while only one is to be "chosen by the Universities of Glasgow, Aberdeen, and St. Andrew's collectively." The principle on which this representation is based is totally inexplicable, except on the supposition that the various bodies possess various degrees of parliamentary influence. The privilege of every University ought to be in proportion to the number of its graduates, and the standard of its examinations. Few will now venture to deny that, in these respects, the ancient University of St. Andrew's stands among the highest.

The number of Medical graduates of this our once arch-episcopal city, owing to the liberal terms of admission, is now very large; and any one who turns to the last number of your Journal, and looks over the questions submitted to candidates at the last term, will at once see that its degree is as good a proof of scientific attainments and professional competency as any examination in the country.

Let those who are inclined to be sceptical observe, that, after five written examinations (the first being divided into two parts), averaging two hours each, every candidate is submitted the following day to a *viva voce* examination, fully equal to the London College or Hall, when it at once becomes apparent that graduation at St. Andrew's ought to carry with it as much weight as at "any University requiring residence to obtain degrees;" and, indeed, with the exception of the University of London, I believe it will be acknowledged, that no other examinations come up to its standard. When a body of such little Medical consequence as the University of Durham is privileged to choose one member, surely an equal privilege may be extended to the Scotch Universities; and thus, perhaps, we might be able to get Mr. Headlam's representative Bill, instead of being governed by Lord Elcho's "government nominees."

If by this extension the council would be too numerous, we could very well do without the "six persons to be nominated by Her Majesty." And if to this the Bill could be so worded as to place the election of the members (for the Universities) in the hands of the graduates, and (for the Colleges, etc., in the hands of their) members, or Licentiates, the "General Council" would at once represent the whole Profession, and, upheld by the confidence of its constituents, would become all-powerful to defend its rights, and promote its interests.

Trusting these remarks may meet the approval of the Profession,

I am, &c.
May 25th, 1857.

AN ANGLO-SCOTCH M.D.

MEDICAL REFORM AND THE COLLEGE CIRCULAR.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have read with no small surprise in your number of Saturday last, the "Remarks on Mr. Headlam's bill and Lord Elcho's opposition," which are supposed to have ema-

nated from the College of Physicians, and after referring to the bills in question, I have risen from their perusal strongly impressed with the idea that the writer (or writers) of those "Remarks" has either strangely misconstrued the wording, or wilfully misrepresented the purport of the bill produced by the Select Committee of the House of Commons. Certainly some of the facts and inferences assumed in these "Remarks" are entirely without foundation, as I hope to show you in the result.

In the first place, let me assure you that whatever may be the case with Oxford or Cambridge, no circumstances have transpired which could lead the writer reasonably to suppose it probable that the University of London would ever become a party to Mr. Headlam's bill (No. 1), and I am in a position to affirm that neither the Senate nor body of Graduates have for a moment entertained the proposal, that their Medical Graduates should be re-examined by the College of Physicians, believing as they do that their own examination is infinitely superior.

Secondly, the bill for which Lord Elcho now seeks support is not the bill of the Scotch Universities, although Lord Elcho's bill of 1856 might have been characterised as a University bill, but bill No. 3 is actually Mr. Headlam's bill after it was sifted from all partial views of conflicting interests, and reported unanimously to the House by the Select Committee, and appeared with Mr. Headlam's name still attached to it near the termination of the penultimate session. It was then too late for further consideration at that time, but was not rejected or withdrawn for the reason assigned.

It will at once be observed by reference to the bill of the Select Committee, that it in nowise favours the Universities more than the Corporations;—it simply proposes that the Universities of the United Kingdom shall, equally with the Colleges, furnish examiners for the Professional boards, and it provides that there shall be no preponderance of one or other. This being the case the statement is at once disposed of, that the bill is in favour only of the Scotch Universities. Rest assured that no Committee of the House of Commons would recommend so one-sided a scheme as the result of their deliberations, nor would a man of Lord Elcho's broad views and liberal principles be found appending his name to a bill so constituted.

The Corporations, however, are not content with a fair proportion of power and profits; but, with an ambition which their antecedents by no means justify, they seek to disenfranchise Universities which have been licensed for centuries, and compel all candidates to pass their portals, and pay them additional fees.

Thirdly, if, as the "Remarks" go on to state, "the present organisation works well," why do the Corporations seek to alter it by Mr. Headlam's bill? The fact is that it does not work well in these times of progression. The monopolies of Physicians', of Goldsmiths' or Tailors' Companies, are felt to be equally an obstruction to the development of science as of trade, and the public as well as the Profession expect a reform. The present system of diversity of qualification produces so much narrow-mindedness among Practitioners, who have quite arrived at the idea, that because they belong to some special College or Hall, it will stand them instead of personal attainments and Professional works, that it is time matters were amended, not by a more concentrated monopoly, but by the introduction of a general measure, which shall sweep monopolies away, and at the same time provide a sufficient guarantee to the public, that the educational examination of candidates is a sound one, and that the expenses attendant upon it are within the reach of the humblest student.

The Select Committee's Bill provides a minimum examination for all candidates entering the Medical Profession, which will secure the public from ill-educated men, and to which minimum every Physician, Surgeon, and General Practitioner, should be equal. This plan throws no obstacle in the way of passing any more extended examinations, either in University or College, for a higher grade, and no pure Physician or Surgeon will be the worse, but rather the better, for being obliged to know the groundwork of his profession in every department. It is quite reasonable to suppose that besides their participation in the benefits arising from the minimum examination, the Colleges will still further benefit by the enrolment of numerous members or fellows, always supposing their diploma confers an honorary distinction by the excellence of its re-

quirements; and this will act as a valuable stimulus to the improvement of those bodies.

Fourthly. Lord Elcho is corrected, and the House of Commons sagely informed, that the University of London is not an educating but an examining body. Such is the College of Physicians; why then deprive the University of London of its right to license—a right it possesses in common with the Universities of Oxford and Cambridge? The College of Physicians claim the right to re-examine all graduates in Medicine with regard to their practical qualifications, and we are constantly hearing of the practical nature of its examination, as compared with that of Universities. Does the College recollect that not long ago a proposal was made within its walls to introduce the clinical examination of candidates (a mode of examination which is generally allowed to be the most practical of all, and which exists in one University at least), and that it was rejected by a majority sufficient to prove that *ancien régime* in the College is regarded as better than the improved education of its licentiates.

Fifthly. The reasoning is insufficient which compares the licence in Law and Divinity with that in Medicine, for from time immemorial the Universities have conferred a right to practise in Medicine, and no one will assert that because the practice of law is different in the separate divisions of the kingdom, that therefore small pox in one division is great pox in another, or that scarlet fever in England is yellow fever in Scotland or Ireland.

Sixthly. What is the truth of the assertion that the "whole profession" have laboured in framing Mr. Headlam's last bill? That delegates from so many bodies as are mentioned in the "Remarks" should have taken part, is no proof of the assertion. In the Corporations it is well known that a chosen few, called fellows, have the sole voice in the regulation of the Colleges. These form a very small portion of the whole profession, and if hardly pressed the Colleges might confess that even the fellows had not been consulted in this matter, that only the more limited council, who take the responsibility and divide the profits, had acted in the matter; and yet the "whole profession" is spoken of as having produced the Bill! I feel satisfied that if the sense of the entire profession were truly taken, a verdict very different from Mr. Headlam's complicated and expensive scheme of education and examination would be the result. It is scarcely probable that a single one of those practitioners at least would support a bill, of which one of the clauses is so ambiguously worded, intentionally or otherwise, that, retrospectively even, they might be obliged to enrol themselves as members of a college to become eligible for registration, although at the present moment they are legal Physicians in virtue of their University degree.

Finally. The assertion that the Corporations include every legalised practitioner in the empire, is manifestly untrue, for both in England and Scotland many physicians are practising, and that legally, with a University degree alone.

I am, &c.

May, 27, 1857.

A UNIVERSITY MEDICAL GRADUATE.

UNIVERSITY OF LONDON.

THE following are the questions given at the last B.M. examination for Honours:—

PHYSIOLOGY AND COMPARATIVE ANATOMY.

Examiner, Professor HUXLEY.

Of the following questions, candidates are required to answer one of the first two and one of the last two.

1. Give an account of the structure of the human eyeball: compare the structure of the eye with that of the ear; and state what are the principal modifications undergone by the organ of vision in the animal kingdom.

2. What is the essential condition of fecundation; what are the first steps in the process of development of the embryo throughout the animal kingdom; in what respects do fishes, batrachians, birds, reptiles, and mammals differ in the course of their further development?

3. What is the meaning of the term "homology"? On what grounds is it justifiable to assert that two organs or parts are homologous? Illustrate your answer by examples.

4. What are the chief anatomical and physiological peculiarities of the Cephalopoda?

An answer is required to the first question and any one of the three last.

1. Give an account of the more important physical and physiological properties of nerve; under the former head include a statement of what is known with regard to the electrical phenomena exhibited by nerves, and the influence of electrical currents on innervation. Under the latter, state by what experiments the motor and sensory functions of nerves, the reflecting power of the spinal cord, and the direct influence of the nervous system upon the state of the heart and vessels, have been demonstrated. Add any experimental evidence with which you may be acquainted tending to prove the direct influence of the nervous system on secretion.

2. To what classes and orders do the truly parasitic animals belong? Give an account of the anatomy, development, and "Wanderings" of the Trematoda.

3. Of what structures in the embryo are the intermaxillary fissure, the Eustachian tube, and the meatus auditorius, modifications? Why does the processus gracilis of the Malleus lie in the Glasserian fissure, and with what embryonic structure is it continuous or parallel? What proof does embryology afford that the maxillary bone is in its origin entirely distinct from the intermaxillary?

4. Enumerate the most important distinctive characters of the skeletons of an Amphioxus, a lamprey, a eodfish, and a shark.

SURGERY.

Examiners, Sir STEPHEN HAMMICK and Professor FERGUSON.

1. What are the diseases or injuries which may require the removal of the lower extremity at the hip-joint? State the preparations which are necessary previous to the amputation, so that everything may be in readiness; give the various methods of performing the operation, and say which you would prefer, with your reasons for such preference; and you will accurately describe the different parts which are to be cut through as you proceed. Give the method and period at which you would secure the divided arteries, as well as the mode of dressing and placing the stump; and the subsequent management of the case, both locally and generally, according to the favourable or unfavourable symptoms which may arise, either to accelerate the cure or to destroy the patient.

2. Trace the course of the external jugular vein down the side of the neck; and of the temporal artery upwards, from its emerging from the substance of the parotid gland till its final terminations. Describe the various surgical diseases for which blood is drawn from these vessels; give the method of abstracting it; state the treatment to be pursued where unfavourable consequences come on, such as sloughing of the parts, tumefaction of the neck, face, or head, erysipelatous inflammation, repeated recurrence of the hæmorrhage, or any other untoward circumstances following the operation; give also the management of such injuries of the external jugular vein or temporal artery which may be produced by an incised, contused, lacerated, or punctured wound of the side of the neck and head.

3. Describe the course of an inguinal hernia, from its earliest appearance in a fulness above the abdominal ring, till it has passed largely into the scrotum. State the difference between an oblique and direct inguinal rupture; give the symptoms and treatment to be followed, when it is in a reducible, irreducible, or strangulated state; and when you think it necessary to recommend an operation for a strangulated inguinal hernia, you must state fully your reasons for such advice; then describe minutely the method of performing it; with the management of the contents of the hernial sac, according to the various conditions in which they may be found. Give the most frequent causes of death when the operation is unsuccessful, and detail the appearances which you would expect to find by a post-mortem examination of the abdominal and pelvic contents.

4. A man, about fifty years of age and apparently in recent good health, is found lying in the high road in a cold winter's night in a state of perfect unconsciousness, concerning whom no account can be obtained: you are desired to state (after having examined carefully the case) what you consider this man's condition to have arisen from; whether it be one of concussion of the brain, fracture of the skull, apoplexy, epilepsy, exhaustion from fatigue or cold, poison, attempts at strangulation, narcotics, drunkenness, internal hæmorrhage, or any of the other various causes, whether accidental or natural, which may have befallen him; and whatever may be the opinion

you have formed, you are desired to give your reasons for its justification; and in accordance with it describe the treatment you would pursue; and should the case terminate fatally, write down what you would expect to find by a post-mortem examination, to prove the correctness of your judgment and practice.

MEDICINE.

Examiners, Dr. BILLING and Dr. TWEEDIE.

1. Describe the symptoms that denote the entrance of purulent matter in the blood. Give the more probable explanation of the morbid phenomena, including the theory of disseminated abscesses.

2. Describe the varieties in the pulse, and the practical inferences to be deduced from them.

3. Describe the conditions of the heart (organic and functional) which are accompanied by morbid sounds. Show how they may be distinguished from each other.

4. What are the pathological causes of albuminuria? Give the tests for its detection, and the sources of fallacy to be guarded against.

MIDWIFERY.

Examiner, Dr. RIGBY.

1. Describe the difficulties which are met with in the operation of turning, and the most appropriate means for obviating them.

2. Describe the various forms in which occlusion of the os uteri is found at the end of pregnancy; and how would you treat them.

3. What are the contra-indications to the use of chloroform during labour, and how would you obviate them?

4. What is the difference between the effects produced by partial and those produced by complete prolapsus uteri?

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS, FRIDAY, MAY 22.

MILITIA MEDICAL SERVICE.

Mr. BRADY asked the Under-Secretary for War whether it was the intention of Her Majesty's Government to include the Militia Medical Service in the inquiries about to be instituted relative to the Army Medical Department.

Sir J. RAMSDEN replied in the negative.

MONDAY, MAY 25.

ARMY MEDICAL DEPARTMENT.

On Lord Palmerston moving the Army Estimates, Mr. STAFFORD complained that the noble lord had not touched on the grievances of the Army Medical Department, and that the Government had, to all appearances, neglected the recommendations of the Committee which had sat on the subject. It was no answer to his complaints to say that a commission had been appointed to inquire into this subject. It was better to appoint a commission than to do nothing; but as a member of that commission he should enter upon the task which it had undertaken with less hope, and should be less sanguine as to the results of its labour, on account of the disinclination to ameliorate the condition of this department which the Government had hitherto exhibited. So far as the comfort of the officers was concerned, the state of the Army Medical Department was worse than it was before any inquiry took place, because their minds were more unsettled, their prospects were less determined, and their anxieties were greater. What these officers desired was that the Government should either do something for them, or should tell them that they would do nothing, and allow them to choose fairly between entering or continuing in the army, entering the service of the great steam companies, or emigrating to our colonies or to America. One effect of the present uncertainty was to retain in the senior ranks gentlemen who, without any disrespect to them be it spoken, were not now such efficient executive or administrative officers as they might be. The results of the last war, during which we saw our army at one time hastening to destruction, and at another so resuscitated that its average mortality was less than that upon our home stations or in our own islands, had afforded us most important lessons, and we should be deeply guilty if we did not profit by those lessons. For the prevention of disasters in future we must look to other means than adding million after million to our army estimates and

indefinitely increasing our establishments. We must, as the noble lord had said, look to the re-allotment of sums, and to the formation of such establishments as, not too expensive in time of peace, might be efficient in time of war. If the Government had arranged the establishments upon this principle they would have established another claim to the gratitude of the country; but this could not be done so long as they left without adequate remuneration those to whom they must look for the health of the army—whom they could not stimulate by the brilliant rewards and splendid positions obtained by combatant officers, and who were now so dissatisfied with the service that the Director-general of the Army Medical Department had not candidates to fill up all the vacancies on his list. Therefore, he begged the Government to consider whether, during the present financial year, they could not do something for this department, especially by raising the pay of the assistant-surgeons and reconsidering the questions of retirement and of promotion from rank to rank. No doubt, under the able direction of the right hon. gentleman the member for Wiltshire (Mr. S. Herbert) much valuable evidence would be given to the commission appointed to inquire into this subject; but much time must elapse before the report of that commission could be presented and acted upon, and he would therefore urge upon the members of the Government, and especially upon the noble lord at the head of the War Department (Lord Panmure) that it was not yet too late to do something for the Medical officers. The noble lord (Lord Palmerston) had justly praised the successful labours of the commissioners who were sent out to the Crimea. The Army Medical Department felt that had they had power to carry out many of the suggestions made by that commission, the state of the camp would not have been such as it was when the commissioners arrived there. They felt aggrieved that credit should have been given to the commissioners for suggestions which they said they had previously made, but which had not been attended to. He (Mr. Stafford) had moved for the production of papers which would show whether or not this assertion was well founded. If it were, it would establish the necessity of giving to the officers of the Army Medical Department more powers; if it were not, it would prove that the officers of this department were deficient in the sanitary knowledge possessed by civilians, and would demonstrate the desirability of making some arrangement which should attract to it men of greater education and more scientific attainments than, under the existing system, would join the army. The report of the commissioners stated:—

“In May, 1855, the army arrived at its most healthy state. The weekly admissions into hospital averaged a little more than 1·6 per cent. of the force, and the weekly deaths little more than 8 per 1000 of the force per annum. This death rate is about the same as exists in the healthier districts of England for males of the army ages. But assuming this present country rate as an attainable standard for the whole of England, we are at once struck with the very unhealthy condition of the army in home stations. It appears from the army statistical report, 1853, that the mortality among infantry of the line in the United Kingdom is 16·8 per 1000 per annum, from disease alone, while in the Foot Guards it is 19·8 per 1000. In the model dwellings of the metropolis the mortality for all periods, from infancy to old age, has ranged between 12·6 and 13·9 per 1000 per annum, a little more than half the mortality of the metropolis for the same years. On comparing the mortality in these dwellings of all ages with the picked lives of the army, we have a most convincing proof of what may be done, and how much requires to be done, for the sanitary improvement of the soldier. The loss of efficiency from invaliding and sickness in the army also very much exceeds what is experienced by the working classes at the same ages.”

The noble lord had said, and said most justly, that the Government had taken measures for improving the accommodation in barracks, and also in the clothing of the troops; but clothing, diet, and accommodation, whether in barracks or in the hospital, depended for their success upon the intellectual cultivation of the Medical officers of the army. So long as only the dregs of the young men adopting the Medical profession were induced to enter the Medical department of the army so long would a wasteful prodigality be perpetuated, and so long would the lessons of the last war operate in vain. (Hear, hear.)

POOR-LAW MEDICAL REFORM ASSOCIATION.

A PUBLIC Meeting of Poor-law Medical officers, and other members of the Profession, was held at the Freemasons' Tavern on Thursday afternoon, the Right Hon. the Earl of Shaftesbury in the Chair.

The CHAIRMAN, in opening the proceedings, said he did not think it was necessary to occupy the time of the meeting by any preliminary observations. He believed the petition which was proposed to be presented to Parliament was substantially, if not altogether, the same as that one discussed at a previous meeting, at which he had the honour of taking the Chair. In that petition he heartily concurred, believing it to represent their case very fairly, and to require no more than was absolutely just. He believed that there were some points of difference of opinion among the gentlemen who were then assembled, but it was neither necessary nor expedient for the Chairman to enter into those matters of controverted detail. He did not come there for that purpose; he came for the purpose of asserting his strong and decided conviction that the status of the Poor-law Medical officer was not what it should be. (Applause.) His position was one of considerable importance, and should be recognised by adequate remuneration and respect; and not only with regard to the gentlemen themselves, for whom he had the highest esteem, and with the labours of many of whom he had been conversant, having had the pleasure and benefit of acting with them personally, in various efforts in behalf of the working classes, but also the interest of the working people themselves was very much wrapped up in the recognition of the due position of the Poor-law Medical officer. (Applause.) There was no one conversant with the state of the poor but would see how much of their physical, and consequently their moral good condition, depended upon the state of health in which they were kept. It depended on the state of their dwelling and the influences which beset them, but certainly also upon the means they had of resorting to medical remedy in the first outset of their disorder; and in the progress of the disorder, should it be one of a complicated character, very much depended on the knowledge and experience of the medical gentleman in attendance. He thought they might put aside the consideration of the Poor-law Medical officer altogether, and argue the question with great force without mentioning his name, solely with reference to the interest of the working people. And in the present day, when men's eyes were becoming more opened than they formerly were to the prodigiously evil consequences resulting from the state in which the people had been left—their want of ventilation, drainage, and a supply of water, and their general domiciliary condition—he considered that the duties of the Medical officer were ten times greater in importance. We were beginning to find out that there was no security for any one of the departments of the state, but in the thorough well-being and good condition of the people. (Applause.) If we wished to have a sober people, a contented people, a loyal people, a people ready to recognise the rights of each other and of all who were superior to them in property or in station, we must have people placed in such circumstances of physical health as to be able to give full development to all the faculties of mind and body. To produce this result was essentially the duty of the Poor-law Medical officers; they were placed in the denser parts of the population, in almost hourly contact with the people; they were the guardians, to whom were intrusted very great interests; and a body of gentlemen to whom such mighty interests were confided, and of whom so much was exacted, in point of labour, in point of science, and in point of responsibility, should be treated as some of the most valuable officers of the state, and proportionately remunerated. Not to treat them in this way, was socially and financially an enormous error, not to call it, politically speaking, an enormous crime. The more he saw of the working classes, the deeper conviction he had of their necessities; and he should always be happy whenever he could be of use, either there or in his place in parliament, to assert the indissoluble rights of the Poor-law Medical officers. (Applause.)

Mr. LORD, one of the Secretaries, read a short statement, detailing the principal facts mentioned in the Petition.

The Petition shows that the Poor-law Medical officers of England and Wales, upwards of 3000 in number, have the

care during sickness of 897,681 paupers, and a large proportion of the labouring population, estimated at about 4,000,000. That from a careful analysis of returns collected by Mr. Griffin, the average payment of 500 Medical men, taken promiscuously, is at the rate of 2s. 9½d. for each case of sickness they attend, including the cost of drugs, instruments, pharmaceutical utensils, servants, horses, and carriages, tolls, and taxes; while the bare cost of the drugs and appliances in Hospitals, Dispensaries, and Asylums, is, on an average, more than 3s. per case, and a far higher rate of remuneration is allowed for Medical attendance on the inmates of prisons. That the present system of under-payment works injuriously to the Medical man and the poor, as proved by the fact that in 1855, 290 Medical officers resigned, and in 1856, 249; while the public suffer in the diminished service it receives from the labouring classes, and in the increased amount of poor-rates, the number of persons made paupers by sickness constituting 72 per cent. of the whole number of paupers. The petitioners therefore pray:—1. That a uniform scale of payments for Medical attendance on the poor shall be adopted throughout the kingdom, the rates varying at present from 3d. to upwards of 20s. for each case. 2. That a fixed salary, founded on the average number of cases attended during the last three years, be adopted, the sum to be calculated at not less than 5s. per case, where the medicines are found and dispensed by the Medical officer, or 2s. 6d. per case where the medicines are found and dispensed at the charge of the Guardians, with at least 1s. extra for each mile the patient resides from the Medical officer's house, the journey to be paid for only once during an illness. 3. That the scale of extras allowed by the Poor-law Board (including the fees payable for midwifery) be extended, to include the medical officer in charge of the house, as well as the district officer, and that there shall be no discretionary power to give a fixed salary instead of extras. 4. That all Poor-law Medical appointments, not only now in force, but hereafter to be made, shall be declared permanent. 5. That the class of persons entitled to Medical relief be defined, and not left to the discretion or caprice of relieving officers. 6. That a revision of salaries take place triennially in each Union if desired by the Poor-law Board, Board of Guardians, or Medical officers. 7. That Medical orders shall continue in force for each case no longer than three months, and if renewed shall be counted as fresh orders. 8. That a Medical man conversant with Union practice have a seat at the Poor-law Board, and especial control over the Medical department.

Mr. J. PROPERT moved the adoption of the Report. Although, thank God, he had nothing to do with the Union service or with Unions, he could not but feel interested in the object of the meeting, both as a Christian and as a practitioner. If the Union Surgeons were not put on a better footing, the noble Asylum at Epsom would not accommodate a hundredth part of those who would require admission. He was sorry that out of three thousand Union Medical officers not more than 500 had come forward. Unless they made a more general effort in their own behalf they would be sure not to get any redress.

Dr. SIMON, in seconding the motion, said he thought it one of the most cheering signs that an attempt was being made on the part of the profession itself to raise the condition of Medical men, coupled with an equally ardent attempt to improve the condition of the sick poor, who were always the objects of the Medical man's solicitude. Until the remuneration of the Poor-law Medical officer was raised, they all knew that a certain needy portion of the profession would take whatever they could get, in the hope of bettering their position; consequently, a high standard of Medical education was not obtained. One very significant fact was, that nearly three hundred of the very best Medical men retired from Union service every year. The present state of things could only be altered by the Medical officer being made independent of the power of the Guardians, and receiving an adequate remuneration.

The Earl of SHAFTESBURY here left the meeting, and the chair was afterwards occupied by Mr. Propert.

Mr. GRIFFIN then read a speech, presenting a detailed statement of the position of Poor-law Medical officers, and showing the necessity for an alteration in the present arrangements, which he considered were highly inconsistent and anomalous. The list of extras was extremely so. A short time ago he performed upon a young woman the operation of resection of the elbow-joint, for which he received

nothing; whereas, if he had cut off her arm he would have been paid £5, although it had made the patient chargeable to the parish for life. Many Medical men were obliged to submit to the present system, in order to keep strangers from their private practice. In many cases, the Guardians accepted men with a single qualification, though contrary to the letter of the regulations. He hoped that as vacancies occurred, doubly qualified men would be appointed, not merely for the sake of the fully educated, but also for the sake of the poor, whose lives were equally dear with those of the rich. He had the highest possible respect for the acts of the Poor-law Board. What he desired was a central power, that should fully carry them out, and not place three thousand Medical men under the direction of gentlemen unacquainted with Medical affairs. (Applause.)

He proposed—"That the Petition to the House of Commons, copies of which had been widely circulated, be adopted, signed, and presented forthwith, and that the Union Medical officers, and other members of the Profession, be earnestly requested to use their influence with members of the House of Commons, that general attention may be called to the subject."

Dr. BRADY, M.P., said it was the fault of the Medical profession that the Poor-law Board had such power as they possessed, and so long as the profession submitted to such degradation they would be punished as they had hitherto been. (Hear, hear.) He regretted the absence of a representative of any one of the corporate bodies. Were medical men mere automatons, that they should put up with such a state of things? Would they pay their money, and get no sympathy in return? He felt that they should bestir themselves, and not allow the corporate bodies to carry out their own views, irrespective of the well-being of the members. They should unite with corporate bodies, and act in unison with them, and he was sure the House of Commons and the House of Lords, and the people at large, knowing the many virtues of Medical men, would be glad to yield them their proper position, and not one evil would be unremedied. Let a pressure be put upon them, and they would do what they ought to have done long since, raise their voice in favour of their members, and gain for them that consideration on the part of the Legislature of which they were so highly deserving. (Applause.)

Dr. SPARKE said, it was cause of regret that the Poor-law Board were unable, from their position, to sympathise with Medical officers.

The Resolution was put to the meeting, and carried unanimously.

Mr. JAMES LORD moved the next Resolution,

"That, in order to render the petition of the Association more effective in the House of Commons, it is desirable that the Medical officers of every Union should forward to their respective representatives, for presentation, a general petition, praying the Legislature to consider the petition with a view to an amelioration of the present system. He said there were many grievances existing in this country, from which, if the people would not stir themselves, they deserved to suffer for ever; but, however, if they were more generally made known, they would, sooner or later, be relieved. Not only should the interests of the Medical gentlemen themselves be considered, but it was still more important for the benefit of the population among whom they laboured, that they should be able more efficiently to discharge their duties, and be more adequately remunerated. Some time ago he made a calculation that the hard-working labouring man received less than the pauper, and the pauper less than the criminal; and now he found that a still smaller sum was awarded to the Medical man. (Hear, hear.) The reason why they had not succeeded in their movement was because they were not strong: and they were not strong because they were not united. Until they learned to move unitedly, laying their ease before the public more frequently, through the press, by petitions to Parliament, and in connexion with those great bodies to which reference had been made, they would not have that redress to which they were justly entitled.

Mr. COLSTON (of Bishop Stortford), seconded the Resolution.

Carried unanimously.

Dr. WEST (of St. Alban's), moved a vote of thanks to the Earl of Shaftesbury, for his attendance at the meeting, and the

great assistance his lordship had rendered at various times to the cause of Poor-law Medical relief.

Mr. ROGERS (Strand Union), in seconding the motion, said he had not gained a halfpenny by his appointment, but had suffered the greatest annoyance, especially during the last six months, from the Master. He demanded an investigation, in the course of which he was told that he should keep a qualified assistant, while his salary was only fifty guineas a year, and he had an average of 126 patients weekly. The Poor-law Board were entirely against them; they must go to the Poor-law Board's masters, and if they enlisted the sympathy of the House of Commons in their cause they might not succeed this session, or next, but they would succeed eventually.

The motion was carried by acclamation.

Dr. ARMSTRONG (of Manchester) moved—

"That this meeting deeply regrets the readiness with which some of their Medical brethren seek to fill vacancies that have been created by the resignation of Medical officers in consequence of the arbitrary treatment of Boards of Guardians, or through a very low payment of professional services." Although it was difficult sometimes to decide what was strictly right in regard to competition, yet if every Medical man could stand by, and see these appointments go past him, the present state of things would soon be altered. An instance lately occurred in his own district, when such a course of action had the effect of materially increasing the salary of an officer.

Mr. BROOK (of Henley-on-Thames), seconded the motion. He had resigned his post, from which he had never gained a shilling, because he would not submit to the dictatorial and uncourteous conduct of the Master. He feared they would get little redress by their petition. The best thing they could do, if they could get no remedy, was to go in a body to the Poor-law Board, and tender their resignations. During the war with Russia they had the game pretty much in their own hands; they lost that opportunity to a great extent, but it was not altogether gone. The question was, whether it was not worth while actually to strike. (Laughter.)

Mr. GRIMBLEY (of Banbury), proposed,

"That every union should form a distinct Association."

He had recently been triumphant over a mean and dastardly attempt to take a Union, worthless as regarded remuneration, over his head. He only wished that in his neighbourhood the same respectability and the same ideas of medical dignity existed as in Manchester.

The Resolution was unanimously carried.

Mr. RICHARD (of Great Bardfield) moved—"That the recent manifestations by Medical students in furtherance of Poor-law Medical relief, at the public meeting held in London, on the 12th of March last, over which Mr. Layard, M.P., presided, and in Edinburgh, on the 30th March, over which Mr. Black, M.P., presided, and similar meetings in other provincial towns, are much to be commended, as evincing an improved tone of feeling, and a determination on the part of those about to enter the profession to uphold its dignity and character."

He considered that the position of Medical relieving officers in agricultural districts, where it was absolutely necessary to provide horse-flesh, was even worse than in large towns. It was said that poverty was a great demoraliser; and the observation applied in its full force to Medical men. If a man with a large family was compelled to supply medicine, frequently of an expensive character, the prime cost of which amounted to more than his salary, it was hardly to be expected that he could preserve his moral rectitude.

Mr. HUTCHINSON (of St. Alban's) seconded the Resolution.

Dr. SPARKE thought the Medical Students were deserving of the best consideration, for having in such numbers withstood every attempt which had been made to induce them to step in and fill the place of a qualified Practitioner.

The Resolution was unanimously passed.

Mr. GANNON proposed—

"That the cordial thanks of this meeting be presented to the Committee of the Poor-law Medical Reform Association, for the exertions they have made in furtherance of the objects of the Association."

The Resolution was seconded by Dr. MARSH, and carried unanimously.

On the motion of Dr. BURNET, a vote of thanks was passed to Mr. Richard Griffin, the Chairman of the Association, who briefly acknowledged the compliment.

Mr. COOPER (of Ixworth, Suffolk), proposed—"That the

cordial thanks of this meeting be given to the weekly Medical press, for the great assistance it has uniformly given in furtherance of the cause of Poor-law Medical relief, and to the press in general."

The Resolution was seconded by Mr. THURNALL, and passed unanimously.

Mr. CORDWENT (of Taunton), proposed a vote of thanks to the Chairman, Mr. Propert, which was carried by acclamation.

Mr. PROPERT having returned thanks, the proceedings terminated.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 22nd inst. :—

DYER, JOHN EDWARD, Hornsey-road.

EVANS, JOHN, Gloucester-cottage, Regent's-park.

FLUDER, CHARLES JAMES, Lymington, Hants.

GERRARD, JOHN STOTHERT, Falmouth, Jamaica.

GREENE, JOHN, Birmingham.

GREGORY, GEORGE, Westoughton, near Bolton.

HYDE, RICHARD A., Longford, Ireland.

MEREDITH, HENRY PRICE, Upper Seymour-street.

PRITCHETT, HENRY, York.

VERCHERE, ALBERT MARC, Geneva, Switzerland.

WILSON, HENRY BRASE, Hobart Town, Tasmania.

At the same meeting of the Court, Messrs. JAMES LILBURNE and TIMOTHY JOHN HARAN passed their examinations for naval surgeons. These gentlemen had previously been admitted members, the former of the Edinburgh, the latter of the Dublin College of Surgeons, their diplomas bearing date respectively April the 16th, 1845, and October the 2nd, 1849.

Also on the 25th inst.,

HILL, J. B. K., Lymm, near Warrington, Lancashire.

KEARNEY, E., Clonmaney, Carndonagh, Ennishowen, County Donegal.

LEWIS, HENRY, Blackheath.

LEWIS, JAMES POTTER, East India Company's Service.

MEERES, EDWARD EVAN, Mile End.

MONCKTON, FRANCIS ALEXANDER, Maidstone.

ROGERS, RICHARD HENRY, Youghal, County Cork.

SLY, WILLIAM, Wincanton, Somerset.

SIMPSON, ROBERT, Shapp, Westmoreland.

WHITCOMB, H. M., Miltown, Milbay, County Clare.

At the same meeting of the Court, Mr. MARMADUKE PHILIP SMITH WARD, of the Royal Marines, passed his examination for naval surgeon; this gentleman had previously been admitted a member of the college, his diploma bearing date the 30th of June, 1848.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise on the 21st inst.

FINLOW, ALEXANDER, East Harling, Norfolk.

HOLT, JAMES, Castleford.

HOYLE, THOMAS ELKANAH, Heighington, Lincolnshire.

JONES, JOHN EDWARDS, Dolgelly, North Wales.

KNAGGS, HENRY, Huddersfield.

LLOYD, EDMUND, Richmond, Surrey.

RUTTLEDGE, THOMAS EDWARD, Farringdon, Berkshire.

SHARP, CHRISTOPHER, Oldham, Lancashire.

WALKER, THOMAS JAMES, Peterborough.

DEATHS.

CAUCHY.—On the 23rd inst., at Secaux, the Baron Cauchy, aged 68, one of the most distinguished members of the Academy of Sciences at Secaux, and well known by his analytical labours.

CHADWICK.—On the 8th inst., aged 35, Mr. N. F. Chadwick, Park House, Royton. M.R.C.S. Eng. 1843; Medical officer of Royton District, Oldham Union.

EASTWOOD.—On the 16th instant, aged 29, at Oldham, Mr. Thomas Eastwood. M.R.C.S. Eng. 1854; L.F.P.S. Glasg.; L.M. Glasg. 1853.

FURNESS.—May 18, at Newcastle, Mr. Thomas Allason Furness, son of the late Rev. John Furness, many years

curate of Ponteland. F.R.C.S. Eng. 1854; M.R.C.S. 1839; Surg. Newcastle Dispensary; Lect. Anat. and Oper. Surg. Coll. Prac. Sci. Newcastle.

GRUGGEN.—On the 26th instant, at Chichester, Dr. H. M. Gruggen. M.D. St. Andrew's, 1845; M.R.C.S. and L.S.A. 1844. He was highly respected, and his sudden death is much lamented.

HODGSON.—May 15th, at Hull, Mr. W. Hodgson, Surgeon.

MORLEY.—On the 17th inst. Mr. Thomas William Morley, M.R.C.S. Eng., 1823; L.S.A., 1821.

PAGE.—At Ipswich, on the 6th inst., aged 19, Mr. George Page, of consumption, pupil of Dr. Letheby, and Medical Student at the London Hospital.

SORBY.—May 11, at Hulme, Manchester, after a short illness, Mr. W. Sorby, Surgeon, aged 64.

TUCKER.—At Edinburgh, on the 10th inst., Samuel Reeve Tucker, M.D., Assistant-Surgeon, 7th regiment Bengal irregular cavalry.

WALKER.—On the 22nd instant, at Hendon, aged 54, Henry Walker, Esq., H.E.I.C. Service, late Professor of Physiology and Comparative Anatomy in the Calcutta Medical College, and formerly Surgeon to the Governor-General Lord Hardinge.

APPOINTMENTS.

At a meeting of the General Committee of the Liverpool Southern Hospital on the 4th instant, Mr. Sidney E. Proctor, M.R.C.S. Eng., L.S.A. Lond., was appointed junior House Surgeon.

THE ROYAL HOSPITAL.—This Institution held its second Anniversary Dinner last week at the London Tavern, and was presided over by Mr. Charles Dickens, at whose suggestion the Institution was founded in 1854. It was pointed out by him in "Household Words" that, although there were hospitals for the cure of every possible ailment or disease, yet there was not one for the reception of persons past cure. On this hint a society was formed to provide for the permanent care and comfort of those who, by disease, accident, or deformity, are hopelessly disqualified for the duties of life. Mr. C. Dickens, in proposing "Prosperity to the Royal Hospital," gave a most interesting account of a visit which he had recently made to the temporary hospital at Carshalton, and described in his own graphic style the calm and Christian-like resignation displayed by the inmates of the house. He said, that among them all he beheld a tranquillity of manner and a serenity of mind that perfectly amazed him, considering that they were every one of them incurable. The building, however, was not, he said, what it ought to be; it required enlargement, and needed many appliances. He therefore strongly appealed to the company to contribute towards its support, considering, as he did, that an Institution of this description was a natural and necessary adjunct to every hospital in the kingdom. Dr. Reed, the Secretary, then read a list of subscriptions, which amounted in the aggregate to upwards of £1270.

GREAT NORTHERN HOSPITAL.—The following is a list of the Medical officers appointed to this new Hospital:—*Consulting Physicians*—Dr. Copland, 5, Old Burlington-street. *Physicians*—Dr. Croft, 2, Woburn-square, Dr. Handfield Jones, 33, Albion-st., Hyde-park, Dr. Leared, Finsbury-sq. *Surgeons*—Mr. Gay, F.R.C.S., 10, Finsbury-place, South, Mr. Statham, F.R.C.S., 43, Mortimer-street, Cavendish-square, Mr. Savory, F.R.C.S., 13, Charter-house-square. *Assistant-Surgeons*—Mr. Latham, M.R.C.S., 11, Judd-place East, New-road, Mr. Price, M.R.C.S., 7, Green-street, Grosvenor-square, Mr. Lawson, M.R.C.S., 63, Park-street, Grosvenor-square, Mr. Maunder, F.R.C.S., Finsbury-place, South. *Surgeon Accoucheur*—Mr. Hill, 22, Mecklenburgh-square. *Ophthalmic Surgeon*—R. M. Lawrence, M.D., 21, Connaught-square. *Aural Surgeon*—Mr. Harvey, F.R.C.S., 2, Soho-square. *Dentists*—Mr. I. Statham, 43, Mortimer-street, Cavendish-square, Mr. C. J. Fox, 27, Mortimer-street, Cavendish square. *Joint Secretaries*—Mr. F. Smith, 19, Essex-street, Strand. Rev. R. C. Paekman, Priest in Ordinary to her Majesty, and Minor Canon of St. Paul's Cathedral.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL.—Last week, the anniversary festival of this charity was held at Willis's Rooms, King-street, St. James's; Mr. B. B. Cabbell, M.P., in the chair. From the Report of the Society it appeared that, in

spite of almost insuperable difficulties, the new hospital had been rebuilt at a cost of 4,000*l*. The new building was well proportioned, admirably ventilated, warmed by hot water apparatus, and capable of receiving 50 patients, though, in consequence of the smallness of the funds, the committee were reluctantly compelled to limit the number to 30 in-patients. The chairman pointed out that the hospital admitted single women who claimed its shelter for the first time. Subscriptions to the amount of 500*l*. were announced during the course of the evening.

ST. MARY'S HOSPITAL MEDICAL SCHOOL.—The distribution of the Prizes and Certificates of Honour, awarded in this School during the past year, took place on Wednesday, May 20th, Sir James Kay-Shuttleworth, Bart., in the chair. The proceedings opened with the reading of a short report by the Dean of the School, upon the present position of the Institution. The following are the names of the successful competitors who then received prizes, etc.:—

Anatomy, Senior, 1856-7—Prize: Mr. H. Howard Hayward. Certificate of Honour: Mr. James Henry Jeffcoat.

Anatomy, Junior, 1856-7—Prize: Mr. Arthur Myers. Certificate of Honour: Mr. Edwin Chisholm.

Practical Anatomy, 1856-7—Prize: Mr. Mark Farrant.

Chemistry, Senior, 1856-7—Prize: Mr. Henry Ubsdell. Certificate of Honour: Mr. James Henry Jeffcoat.

Chemistry, Junior, 1856-7—Certificate of Honour: Mr. James E. Trevor.

Medicine, 1856-7—Prize: Mr. Thomas L. Ash. Certificate of Honour: Mr. Arthur Lawrence.

Surgery, 1856-7—Prize: Mr. Walter J. Coulson.

Military Surgery, 1855-6—Prize: Mr. Owen Ossian Rogers. Certificates of Honour: Mr. Walter J. Coulson; Mr. Mark Farrant; Mr. G. Edward Gascoyen.

Botany, 1855-6—Prize: Mr. James Henry Jeffcoat. Certificates of Honour: Mr. Henry Hemstead; Mr. Henry Ubsdell.

Materia Medica, 1855-6—Prize: Mr. James Henry Jeffcoat. Certificates of Honour: Mr. H. Howard Hayward; Mr. Thomas L. Ash.

Midwifery, Senior, 1855-6—Prize: Mr. Arthur Lawrence. Certificates of Honour: Mr. E. M. C. Hooker; Mr. F. H. Smith.

Midwifery, Junior, 1855-6—Prize: Mr. Henry Ubsdell. Certificate of Honour: Mr. H. Howard Hayward.

Practical Chemistry, 1855-6—Prizes: 1. Mr. J. H. Jeffcoat; 2. Mr. Henry Ubsdell. Certificates of Honour: Mr. R. C. Price; Mr. E. M. C. Hooker.

Medical Jurisprudence, 1855-6—Prize: Mr. E. M. C. Hooker. Certificate of Honour: Mr. Arthur Lawrence.

Comparative Anatomy, 1855-6—Prizes: Mr. Dracachis; Mr. R. C. Price.

The chairman then delivered a very eloquent and able address, the theme of which was the moral aspect of the Medical art. A vote of thanks was then moved by Mr. Lane, and seconded by Mr. Judd, to Mr. Spencer Smith for his services as Dean of the School. Dr. Sibson moved, and Mr. Coulson seconded, a vote of thanks to Sir James Kay-Shuttleworth, with the expressed wish that he would allow his address to be published. The Chairman briefly replied, acceding to the request. We shall commence the publication of the address next week.

MIDDLESEX HOSPITAL. At the distribution of prizes, May 21, 1857, the Bishop of London in the Chair, the following were the successful competitors:—

Medicine—Dr. Stewart and Dr. Goodfellow—Prize: Mr. John Tatham, Burton in Lonsdale. Certificate—Mr. Daniel Devereux, Bromyard, Herefordshire.

Surgery—Mr. Shaw—Prize: Mr. John Tatham, Burton in Lonsdale. Certificate: Mr. Daniel Devereux, Bromyard, Herefordshire; Mr. James William Eaton, Bingham, Notts; Mr. Samuel Barker, Ramsgate.

General Anatomy and Physiology—Mr. De Morgan—Prize: Mr. William Howells Rix, Tonbridge Wells. Certificate: Mr. Robert Jennings, London; Mr. Joseph Brooks Shepherd, Skidhill, Kent.

Descriptive and Surgical Anatomy—Mr. Moore—Prize: Mr. James William Eaton, Bingham, Notts. Certificate: Mr. Samuel Clarke Noble, Kendal, Westmoreland; Mr. Herbert Tayler, Tywardreath, Cornwall; Mr. Charles Hardy Trotter, Coleford, Gloucestershire.

Practical Anatomy—Prize: Mr. James William Eaton, Bingham, Notts; Mr. William Howells Rix, Tonbridge Wells.

Certificate: Mr. Charles Hardy Trotter, Coleford, Gloucestershire.

Chemistry—Mr. Taylor and Mr. Heisch—1st Prize: Mr. Henry Walker Pearson, London. 2nd Prize: Mr. Charles Henry Fowier, Poplar. Certificate: Mr. Henry Martin Grant, London.

Midwifery—Dr. Frere—Prize: Mr. Daniel Devereux, Bromyard, Herefordshire. Certificate: Mr. John Tatham, Burton in Lonsdale; Mr. Henry Buss, London; Mr. James Barrett, Banbury; Mr. Frederick Digby, Maldon.

Materia Medica—Dr. Henry Thompson—Prize: Mr. James Barrett, Banbury, Oxon. Certificate: Mr. Joseph Brooks Shepherd, Skidhill, Kent.

Medical Jurisprudence—Dr. Goodfellow—Prize General Examination: Mr. William Brooks Pool, Canterbury. Ditto Weekly Examination: Mr. William Brooks Pool, Canterbury. Certificate: Mr. John Tatham, Burton in Lonsdale.

Botany—Mr. Bentley—Prize: Mr. William Howells Rix, Tonbridge Wells. Certificate: Mr. James William Eaton, Bingham, Notts; Mr. James Barrett, Banbury, Oxon.

Prize in Morbid Anatomy and Histology—Presented by Oscar Clayton, Esq.—Mr. John Tatham, Burton in Lonsdale.

Clinical Prize in Medicine—Mr. John Tatham.

Treasurer's Prize—Mr. John Tatham.

Honorary Certificates of General Good Conduct and Diligence—Mr. Whatley Barrett, Mr. Henry Buss, Mr. Arthur Ben Harris, Mr. R. N. Inman, Mr. Matthew Mackintosh, Mr. William Brooks Pool, Mr. William Ross, Mr. John Tatham, Mr. John Little Thomas, Mr. William Taylor.

House Surgeons—Mr. Joshua Plaskett, Mr. Arthur Cribb.

Clinical Clerks—Mr. Charles Cumridge Balding, Mr. Samuel Barker, Mr. James Barrett, Mr. John Harding Coham, Mr. Daniel Devereux, Mr. Frederick Digby, Mr. Thomas Pratt, Mr. Charles Hardy Trotter, Mr. John Tatham.

Out-Patient Dressers—Mr. Samuel Barker, Mr. James Barrett, Mr. John Harding Coham, Mr. Daniel Devereux, Mr. Frederick Digby, Mr. James William Eaton, Mr. Thomas Garneys, Mr. Benjamin Hill Humpage, Mr. William Howells Rix, Mr. Isaac Rowlands, Mr. Joseph Brooks Shepherd, Mr. Charles Hardy Trotter.

In-Patient Dressers—Mr. Samuel Barker, Mr. James Barrett, Mr. Whatley Barrett, Mr. Henry Buss, Mr. John Harding Coham, Mr. Daniel Devereux, Mr. Frederick Digby, Mr. George Henry Furber, Mr. Joseph Brooks Shepherd, Mr. John Tatham.

The Bishop of London, after paying a high compliment to Mr. John Tatham, who had carried off the greatest number of prizes and certificates, made a brief but most eloquent and feeling address to the students. Great as had been the benefits which the Hospital had conferred upon the community at large, it had effected none more important or likely to be more lasting in its results than in thus training up a body of educated and Christian gentlemen.

MEDICAL CHARITIES IN IRELAND.—The fifth annual report of the Commissioners of Irish Medical Charities is a blue-book of 90 pages. It informs the Lord Lieutenant that in the year ended the 30th of September, 1856, 594,673 dispensary tickets, and 146,564 visiting tickets, were issued throughout the four provinces of Ireland, making a total of 741,237. In the year 1855, the total number of tickets was 732,563; in 1854, 695,025; and in 1853, 690,411. The total expenditure on the medical charities last year amounted to the sum of £90,236, of which £16,195 went for medicines, etc., £6,803 for rent, and £59,458 for salaries of medical officers and apothecaries. The average poundage for the maintenance of the dispensaries on the valuation of Ireland was 1.85d. last year, against 1.86d. in the preceding year. The imperfect manner in which vaccination is carried out at the dispensaries has been before indicated, and last year the Commissioners addressed a circular to the various committees, earnestly requesting them to use their best efforts to promote vaccination, and to suppress the barbarous and illegal practice of inoculation for small-pox by every means at their disposal. This measure has been attended with good results. Vaccinations have increased, and many itinerant inoculators have been prosecuted and punished. But, although this result is gratifying, the Commissioners still adhere to their opinion of the imperative necessity of providing by legislation for the more effectual carrying out of gratuitous vaccination.

MURRAIN IN ITALY.—A Genoa paper says that in the Liguria, in the neighbourhood of Voltri, the epidemic prevailing among cattle in the north of Europe had been manifested in several instances. The natives had given it the name of "lebbra;" and the milk of cows affected by it was sour and unfit for use, and no one dared to eat of the meat of beasts that had shown symptoms of the malady. About 40 cases had been ascertained there, but from all other parts of this country, the reports state that the cattle are in a very healthy condition.

THE MURRAIN AMONG CATTLE.—A Bill has been introduced by Mr. Bentinck and Mr. Stafford to amend the Acts to prevent a spreading of diseases among sheep and cattle. It simply enacts the following clause—namely, that "from and after the passing of this Act any person exposing or bringing or attempting to expose or bring any horse, ox, bull, cow, calf, or other horned cattle, sheep, lamb, or other animal, into any market, fair, or other open or public place, where animals are commonly exposed for sale, knowing such horse, ox, bull, cow, calf, or other horned cattle, sheep, lamb, or other animal, to be infected with or labouring under the diseases called glanders, pleuropneumonia, sheep-pox, variola ovina, any or either of them, or any other contagious or infectious disorder; and any person turning out, keeping, or depasturing any horse, ox, bull, cow, calf, or other horned cattle, sheep, lamb, or other animal, infected with or labouring under the said diseases, any or either of them, or any other contagious or infectious disorder, in or upon any forest, chase, wood, moor, marsh, heath, common, waste land, open field, road side, or other undivided or unenclosed land, shall, on conviction of any such offence, forfeit and pay any sum not exceeding 20*l*.; and the said Acts respectively hereinbefore recited shall continue in force and be read and construed as if this enactment were incorporated therein, and all the provisions of the said Acts respectively with respect to the penalties and forfeitures thereby imposed, and the recovery and application thereof, shall be applicable accordingly."

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 23, 1857.

BIRTHS.

Births of Boys, 885; Girls, 748; Total, 1633.

Average of 10 corresponding weeks, 1847-56, 1480.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	497	451	948
Average of the ten years 1847-56 ... ..	...	...	1007
Average corrected to increased population ... ..	...	...	1108
Corrected average for corresponding week in ten years 1847-56	522.6	483.9	1006.5
Deaths of people above 100 ... ..	...	...	1
Deaths in 13 General Hospitals	36	10	46

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population. 1851.	Small-pox.	Measles.	Scarlatina.	Hoop-ing-Cough.	Dia-rrhoea.	Ty-phus.
West	376,427	..	3	1	6	..	2
North....	490,396	2	7	6	12	5	4
Central ..	393,256	..	6	1	17	2	7
East	485,522	..	7	3	14	4	9
South	616,635	..	3	1	7	1	11
Total..	2,362,236	2	26	12	56	12	33

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29.706 in.
Mean temperature	58.9
Highest point of thermometer	79.0
Lowest point of thermometer	45.0
Mean dew-point temperature	50.5
General direction of wind	S.W.
Whole amount of rain in the week	0.35
Amount of horizontal movement of air in the week	550 miles.

DEATHS REGISTERED DURING THE WEEK.

CAUSES OF DEATH.	In the Week ending Saturday, May 23, 1857.						Averages of Temperature and Deaths in 10 Weeks.
	Deaths of Persons.						
	AT ALL AGES.	Under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.	At 80 Years of Age and Upwards.	
	Mean temp.						
Mean Temperature	58° 9						55° 5
ALL CAUSES	948	468	113	163	168	29	1006 5
SPECIFIED CAUSES	938	466	113	162	168	29	998 1
DISEASES:—							
1. Zymotic Class	163	143	14	5	4	2	229 6
2. Dropsy, Cancer, and others of uncertain seat	36	2	1	12	18	3	44 8
3. Tubercular Class	167	62	51	43	10	1	193 4
4. Of Brain, Nerves, etc. ..	116	64	9	24	18	1	121 4
5. Of Heart, etc.	53	7	10	17	18	1	33 7
6. Of Respiratory Organs ..	167	89	12	24	38	4	150 1
7. Of Digestive Organs ..	57	25	6	17	8	1	62 9
8. Of Kidneys, etc.	14	..	5	6	3	..	11 1
9. Of Uterus; viz. — Puer- peral Disease, etc. ..	5	..	1	3	1	..	7 2
10. Of Joints, Bones; viz.— Rheumatism, etc. ..	8	2	1	1	4	..	8 1
11. Of Skin, etc.	3	2	..	1	..	..	2 1
12. Malformations	2	2	..	..	..	..	1 8
13. Debility from Premature Birth, etc.	33	33	..	..	..	..	27 8
14. Atrophy	30	20	..	2	8	..	25 8
15. Age	51	..	..	..	35	16	38 3
16. Sudden	2	2	7 4
17. Violence, Privation, etc. ..	26	13	3	7	3	..	32 6
CAUSES NOT SPECIFIED ..	10	2	..	1	8 4

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TO CORRESPONDENTS.

A Mother.—We have seen the trash to which you refer, but we conceive that a serious notice of it on our part would only give it more prominence than it deserves. The charges so recklessly made against the members of our Profession in their attendance on the lying-in room, are almost like the ravings of a lunatic, and we should consider the author to be really insane, did we not observe that the real, though not avowed, object of the book is to recommend in midwifery practice a system of quackery, which has already caused the death of hundreds of victims. The so-called botanic treatment consists in administering stroug irritant and narcotic poisons; and however foolish or criminal such a practice may be in other cases, it is doubly so at the period of parturition, when, in the great majority, the patient requires only the mildest medicines, and the most gentle treatment.

Philellen.—The Greek authors chosen for the examination of candidates at the College of Physicians are usually Hippocrates and Aretæus. The Aphorisms of the former author are generally selected.

Inquirer.—The James's Powder has been repeatedly analyzed, and found to consist principally of oxide of antimony, with an uncertain quantity of phosphate of lime. It is very similar in composition to the *pulvis antimonii compositus* of the Pharmacopœia.

M. T. W. B.—The law of the case must be determined by the terms of the original agreement. If the engagement of the assistant was made for a year, and a yearly payment promised, the superior cannot dismiss him at a month's notice. But if the parties mutually agreed that a month's notice would be sufficient, there is no redress. It is always best to make agreements in writing.

M. D.—It is difficult to draw an exact line of demarcation between Medical and Surgical cases. The very beautiful and simple rule laid down by an eminent veteran Surgeon is that usually followed in practice:—"When a patient brings a fee the case is Surgical, when he does not it is Medical."

Sir James Kay-Shuttleworth's admirable Address on the Moral Aspects of the Medical Art will appear in our next week's number.

Mr. D.—Dr. Mayo's Lectures on Medical Evidence in Cases of Insanity appeared in this Journal in December, 1853.

Mr. Maymors List and Query shall appear next week.

DIVINITY AND PHYSIO.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The enclosed advertisement, which I have cut out of to-day's *Daily Scotsman*, is at your disposal for publication if you think fit, as an amusing illustration of the relationship in which the cure of bodies and souls stand to one another in some parts of these northern regions. Edinburgh, May 20, 1857. I am, &c.

"Andrew Deas visits Edinburgh (55, India-place), every Monday, Tuesday, and Wednesday, for Bone Setting and Sprains, and also to give advice in the Cure of Palpitation of the Heart, Liver Complaint, and Stomach Complaint, as also Jaundice and permanent Cure of Toothache. Reference can be had of the following gentlemen:—Rev. William Reid, Minister, King's Kettle; Rev. Robert Lundie Brown, Free Manse, Largo, Fifeshire.—Mr. Deas will be at Dysart every Thursday, from nine to four o'clock."

Meteorologist.—It is stated that an interesting scientific convention is on the point of being arranged between the different European powers. Daily bulletins of the state of the temperature of France are collected and published. It is proposed to apply this method to all Europe.

Several Notes and Queries are in type, but are unavoidably postponed until next week.

Mr. Baker—The case shall be noticed next week.

Senex.—There are sixty-eight members of the House of Commons who claim exemption from serving on election committees on account of being more than 60 years old.

Medicus.—Within the last fifty years the number of Physicians and Surgeons in Paris has increased from 780 to 1456.

An Irish Subscriber.—Yes; the "Selecta à Prescriptis." The twelfth edition was published by Mr. Churchill in 1854.

Dr. Markham's letter on the treatment of aneurism by manipulation shall appear next week.

The proofs of *Mr. Teale's* and *Dr. Fenwick's* papers arrived too late to admit of their insertion this week.

COMMUNICATIONS have been received from—

Sir JOHN FORBES; Professor LAYCOCK; Dr. FLEMING; Mr. BIRD; Mr. TOYNBEE; Mr. JONES; Mr. TEALE; Dr. FENWICK; Dr. M'WILLIAM; Dr. ALDIS; Mr. SHAW, Manchester; Dr. ARMSTRONG, R.N.; Mr. FOX; Mr. GREEN; Mr. REILLY; REGISTRAR-GENERAL, Edinburgh; Mr. HART; Mr. ANDERSON; Mr. O. SMITH; Mr. W. C. HILLS; Mr. J. WILSON; Mr. R. GORST; Mr. R. HORDLEY; Dr. GREGG; Mr. STOCKWELL; Dr. T. BABINGTON; Mr. A. MARSHALL; Dr. J. CLARKE; Dr. A. WALLER; Dr. A. MACKINTOSH; Mr. J. C. COOKE; Dr. E. WILLIAMS; Dr. COOKE; Mr. J. BROWN; Dr. MARKHAM; Mr. McDERMOTT; Mr. CLARK; Mr. BAKER.

APPOINTMENTS FOR THE WEEK.

30. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing Cross, 1 p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m.: Dr. A. Leared, "On the Expectoration of Fibrinous Casts and other substances."

ROYAL BOTANIC SOCIETY, 3½ p.m.

1. Monday (June).

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.; Orthopædic Hospital, 3 p.m.

ROYAL INSTITUTION, 2 p.m. General Monthly Meeting.

EPIDEMIOLOGICAL SOCIETY, 8 p.m.: Dr. Tripe, "On the Mortality from Epidemic Diseases, at different periods of the year."

ENTOMOLOGICAL SOCIETY, 8 p.m.

CHEMICAL SOCIETY, 8 p.m.

2. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ROYAL INSTITUTION, 3 p.m.: J. P. Lacaita, LL.D., "On Italian Literature—the Seicentisti; Marini; Galileo."

LINNEAN SOCIETY, 8 p.m.

3. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m. Orthopædic Hospital, 3 p.m.

GEOLOGICAL SOCIETY OF LONDON, 8 p.m.

4. Thursday.

Operations at St. George's, 1 p.m.; Middlesex, 12½ p.m.; Central London Ophthalmic, 1 p.m.; Loudon, 1½ p.m.

ROYAL INSTITUTION, 3 p.m.: Professor J. Tyndall, "On Sound, and some associated Phenomena."

ZOOLOGICAL SOCIETY, 3 p.m.

PHOTOGRAPHIC SOCIETY, 8 p.m.

5. Friday.

Operations at the Moorfields Ophthalmic, 10 a.m.; Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8½ p.m.: Professor J. Tyndall, "On M. Lissajoux's Acoustic Phenomena."

ORIGINAL LECTURES.

THE MORAL ASPECT OF THE
MEDICAL ART.AN ADDRESS DELIVERED AT THE DISTRIBUTION
OF PRIZES

AT

St. Mary's Hospital Medical School,

WEDNESDAY, MAY 20, 1857.

By Sir JAMES KAY SHUTTLEWORTH, Bart.

ABOUT a year ago, I had the honor to deliver an address to the Medical School of Manchester, in which I was led to regard the training and science of the Art of Medicine chiefly from the side on which they are influenced by modes of thought, and conditions of intellectual philosophy. I endeavoured to show how, not merely the condition of the intellect of nations, in their advance from barbarism to civilization; not merely the characteristics of race, as exhibited in the Arabic and the Greek; but, even the different schools of metaphysical theory which have existed since the revival of letters, had left each a distinct impress on the methods of investigation, and the process of reasoning in the Colleges of Medicine. I particularly drew attention to the contrast between the methods and results of the idealists of Germany, and the more severe and cautious inductions of the philosophy of the West. Then I endeavoured to show how the forms of philosophy were, at length, co-operating, and, by a resolution of forces, combining the facts collected by the solidists of the West, with the speculations and experimental analysis of the humoral pathologists of the north of Europe.

It was a train of thought which primarily regarded the purely intellectual aspect of the Medical art.

Yet it was impossible to cast even this hurried and imperfect glance at the mode in which medicine had received tribute from all known science, without also suggesting that the art which applies the methods and discoveries of philosophy, not to *matter*, but to *man*, has relations, not of a purely intellectual, but of a moral character.

There is a book in which that which concerns the spiritual relations of man is revealed, in the history of patriarchs, who believed in a spiritual God when all the world was sensual and idolatrous; of prophets, who redeemed a chosen nation from fetishism—of martyrs, who kept the faith in the fire, when commanded to worship the sun—and of that perfect rule of life which we have shown to us by God in Christ, who came to fulfil the law and the prophets, and suffered that we might be saved.

There has been in all time a priesthood, whose office was to ponder all that dimly understood spiritual relation of man to God; to interpret the manifestations of the divine will, to search the oracles, to decypher the prophecies, and especially to teach us how to live according to the doctrine and example of our Saviour.

Now it seems to me that the true dignity of the art of medicine would be lost sight of, if we were to forget that all important as are intellectual methods in the discovery and application of scientific truth, yet when we have to employ an art which interferes with the destiny of man, those who exercise that art are, if I may so speak, but another order of priests.

As there are spiritual, so there are natural laws. The relations of our spirits to the source of life and intelligence, form that object which has absorbed the contemplation of sages, out of whose partial glimpses of truth have arisen the various forms of religion which have, even when perverted, commanded the homage of nations. But, in the life of man, the spirit is so twin with matter, that the vital force, however it may modify, does not supersede, the operation of natural laws. There is, even at this point of contact of the mind with matter, a commingling, as it were, of spiritual and natural laws. There is even a point in which the recognition of the natural law, and submission to it, is a part of that homage of the spirit to the divine will, which is of the very essence of religion.

The Tempter told our Saviour to cast himself from a pin-

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nacle of the Temple, in faith that the rapture of the Psalmist would be realized, and that the angels of God would bear him up, and not suffer him to dash his foot against a stone.

Christ rebuked the temptation. Even he could not hope that he would not be crushed, if he cast himself down, and expected that the laws of nature would be suspended on his behalf. Thus it is of the very essence of religion to search out the will of God in nature, reverently to read and contemplate it, and piously to obey it. In no walk of natural science does this study of the laws of God approach so closely to the confines of the purely spiritual world, as in that physiology, without which all psychology is inscrutable. When we investigate the laws of life, we are on the very threshold of the spiritual world; when we guard and tend its sacred flame, the flame of life, we have assumed an office which is almost that of a priest.

If this be true, then I ought not to apologise to you if I request you to follow me in an unusual path, and to consider with me the Medical art in some of its moral relations.

Yet I would say that the subject ought not to lose its dignity from the defects of the speaker. The truth, as to which I have only a dim insight, will, doubtless, be examined by those who have a keener and purer vision; and a personal sense of imperfection, which even renders the responsibility of such a task a burden almost beyond my courage and strength—makes me dependent upon you for your most considerate construction in my endeavours.

Whatever further apology may be required will, perhaps, be suggested by the peculiar need which exists, that, for the student of medicine, the light of the spiritual world should be shed on all that appears to drag down the dignity of man to the material. There are great mysteries in life which no science will ever solve. There are vital forces the laws of which we may define, but the secret of which we can never penetrate. Before the student of anatomy lies an exquisite and complicated machinery, in which the imponderable agents of nature stir on subtle errands. We know that the machine stops when certain wheels are broken, but we know not why a drop of poison on an open wound, or from the fang of a cobra, stops it in an instant, though the same elements in a combination slightly altered nourish and refresh. Moreover, how strange a thing is sleep!—the image of death. How much stranger somnambulism, in which a part only of the faculties and senses are awake; and what a portent is that trance, in which the body lies cold, senseless, and motionless, for days, undistinguishable from a corpse, yet to revive to life!

Yet it is on this almost sacred mystery of life and organization that the immature youth intrudes too often unwarned, and becomes too soon familiar with it in a degree injurious, if not fatal, to his moral sense.

I remember the first time that I entered a dissecting-room the porter showed me in early in the morning. I was fresh from a pure home. There was a corpse on the table, covered by a sheet. I had an awe of death, and of the cold and livid ruin which it had made. I sat down in silence. I waited perhaps an hour. What thoughts passed through my mind! Then suddenly entered a group of initiated students. They stripped the sheet from the subject. It was a female form. The conversation jarred on my ears—wrung my heart. It was jesting, ribald, even profane. Even the Professor who entered, and who is a man of pre-eminent skill and knowledge, said nothing to rebuke this tone. My blood was almost curdled in my veins. At that moment I could not conceive it possible that I should spend every livelong day of many months in rooms crowded by such bodies, over which would swarm these votaries of a great but thus degraded science.

Doubtless these things are much changed since that day, and the evil I describe has been greatly mitigated, if not removed. Yet this strange familiarity with what is most calculated to shock the sense is but the first step in a series of trials, to which sentiment, intellect, and even conscience are exposed.

The anatomist arranges the bony skeleton and ponders its curious architecture; but comparative and fossil anatomy come to throw a strange light on its homologies. These nails elsewhere are claws; this arm and these fingers are wings; this hand is a paddle; these toes form strange supports under the mass of the mammoth elephant; this little caudal series of bones elsewhere is a tail; this tooth a tusk; this nose is a long, attenuated snout. But, still more strange, this skull,

the seat of intelligence and sensation, is but a developed vertebral.

Then, as respects these muscles, these viscera, the lungs, heart, and alimentary apparatus, through a long series ascending generally from the simple to the more complex—science has traced a scale of being, of which man is the lord, so that all beneath him appears to have been made in preparation for his advent, and to administer to his wants. But the reflex of this thought is, how much of this noble work of creation is common also to the beasts which perish.

Then, as we enter on the study of histological physiology, we are taught that the germ of every structure is a cell, and that the ova, from which all organisation is developed, are also cells. We can watch with the microscope their development, when they have received the vital impulse by which they grow each into its own form. Strange analogies force themselves on the mind of the observer at every stage, until he presumes that he has grasped the most secret law of nature, by which, step by step, in myriads of ages, the monad cell became a man.

Then again, we trace the tide of the arterial blood rich with oxygen, bathing every tissue in a blush of life and health, and the returning current of venous blood, loaded with the waste which every vital action causes, until it is exposed in the exquisite cellular apparatus of the lungs to the air where carbonic acid gas is expired, and oxygen absorbed. In some organs the exact chemical process of secretion has been defined; generally the balance of the vital action, in its chemical relations, has been ascertained; and it is clear that no function is sustained without a chemical change. The eager chemist leaps to the conclusion, that chemical affinities alone exist, and that vital affinities are only another name for obscure phenomena, which science will ere long explore, and explain upon acknowledged and purely physical laws. If, then, no motion nor sensation occur without a chemical change,—what, the presumptuous student asks, is this frame but a mere subtle chemical laboratory, and life itself but a series of molecular changes subject to purely chemical laws?

Every step that is taken in defining the functions of separate structures leads us to analyse the phenomena of life, and to trace each to its peculiar organ. These muscles are endowed with the power of contraction—this tissue with a tonic force. If you cut this nerve issuing from the spinal canal, you deprive the limb which it enters of sensation, but the motive force remains; whereas, if you divide this other channel of nervous power the limb is paralysed, but the sensation remains intact. If you cut one nerve the diaphragm ceases to move; if another, the chemical changes in the lungs are disturbed. If you injure the cerebellum the power of combining the motions of the body is impaired or lost. Slice it on this side, and a bird flies in a circle; cut it in this direction, and it tumbles in the air like a pigeon. Near these tubercular quadragemina is the seat of the wonderful faculty of sight; and not distant is a point, the slightest injury to which is destructive of life. Remove these lobes from the brain of a fowl, and it becomes a mere digesting assimilating apparatus. If you put grains into its beak, they are swallowed; alimentation and nutrition are performed; vital heat is supported; the circulation goes on, but the bird remains without a volition, motionless and senseless.

From facts like these, there have not been wanting those who have thought, and even taught, that life is only a phenomenon of organisation—complicated, but capable of analysis, by which its secrets may all, at length, be unmasked.

These are all downward steps to materialism, a gulf so profound that it swallows up the future, and with it all idea of responsibility; and every rule of life, except that of pleasure or pain, within this span of being. "Let us eat and drink," says the satirist, "for to-morrow we die."

Nor shall we think the spirit with which the student enters the Medical Profession less important, if we reflect at how very immature an age he is brought into contact with some of those conditions of humanity, which have formed the problems on which philosophers and statesmen have pondered; and become familiar with phenomena of being, which have been always accepted as the signs of great powers of nature beyond human control.

Looking on the profession of Medicine as a whole, one of the most refining and elevating influences to which it is subject, is the dependence of the mass of the poor upon it for aid, in the great crises and afflictions of life; and the early

demand which is thus made, on every member of it, for sympathy and charity.

I shall ever consider it as a great personal advantage that my first intimate knowledge of the indigence, moral degradation, and sufferings of the poor was gained, in company with a great Physician, who had sympathy with them, patience and fortitude and hopeful interest in their mutual charities and eccentric virtues, and an insight into the claims of their common humanity, as well as an instinct of the economic truth that the recklessness which arises from misery is more costly than the hope fostered by even that public aid, which, while it gives the indigent security for life, thus defends property from their despair. It was in company with Professor Alison that for some years I threaded the wynds of the old town of Edinburgh, amid a population perishing from the ravages of contagious typhus. At a very early age, I was familiar with those palaces of the old nobility of Scotland, whose rude feudal luxury had been displaced by the Irish family squatting on the floor, with their pig, sometimes six or seven stories above the street.

I witnessed the daily charities of my learned teacher, administered so as to hide the doings of his right hand from his left; the patience with which he gathered from untutored lips and an almost barbarous dialect, the indications to guide his skill; the kindly hints which he dropped for the guidance of the life; the management of the sick; the restoration of the wayward; and the absence of all obtrusive meddling. His presence was balm and consolation, so full was it of all the charities of life.

My lot was fortunate. I can conceive that such scenes may be visited without such a guide. I confess it seems to me almost an awful thing that the immature and unconscious youth should come suddenly in contact with the dire miseries of a great city, without warning of the mischief which he witnesses, and help to read the terrible problem of evil thus disclosed to his contemplation,—half the population dying before two years of age from bad nursing or diet, filth, foul air, and contagion; the seeds of death sown broad cast by want of sewage, scavenging, ventilation, cleanliness, and temperance; pestilence, like the angel in the camp of Sennacherib, destroying a people whose vital force has been undermined by whisky or gin, by toil, improvidence, and want. These are not scenes to be daily visited without injury to the moral sense, unless the sympathy be kept open for everything which affects the lot of man, not simply as the paragon of being; nor even as a client whose cause is ours against all the agencies of disease and death; but as a creature whose mysterious lot it is to have to walk in a straight path, fine as the bridge of Nadir, from earth to heaven, with a seething pit of destruction beneath his feet. All these scenes of want, disease, and death, of famine, pestilence, moral pollution, and ruin, what are they? These pale rickety children; these forms bowed with premature age, crippled or wasted by disease; these degenerate races; these men in whose stunted forms disease or vice seems hereditary; these cretins, idiots, goitred and scrofulous monsters,—what are they?

There is great need that the young student in visiting scenes like these, should be taught what are the laws of nature which have been violated, the hideous consequences of which thus cross his path with their loathsome forms. Then to leave him ignorant of the elements of those questions of social philosophy which affect the condition of the poor, is also to expose him to the risks of grave error, from misdirected sympathy and efforts. But, beyond the physical and social science of which he has immediate need, lie the questions of man's destiny, in a purely moral region of thought, and without an earnest search into which, the highest aims of the art and its professors are bounded by the material. To stop the plague in its insidious invasion of a province, by discovering the law of its diffusion, and counteracting its subtle influence; to teach a city to regulate its factories and mines, its water supply, markets, drainage, burials, and police, so as to minister to the public health; to show the relation of the public health to great questions of social legislation,—these are all functions within the province of the Physician. But the best preparation for the study and solution of all these questions is, the conviction that the highest test of physical health is the moral tone of the population, that every step of national civilization is to be proved by results in the character of society, in the spread of intelligence, in the growth of public and private virtue. In short, that the spiritual part of

our being is so mingled with the physical, that he is only half a physician who is unable to comprehend the moral features of society, when he appears only called by his profession to grapple with its physical evils.

From Dispensary practice in the dwellings of the poor, the student of medicine enters the Hospitals; first, as a clinical observer; then as having charge as dresser, assistant, house surgeon, or resident physician. Here are brought under his eye the casualties of life, its organic maladies, the various forms of infectious and contagious disease. His perceptive faculties are trained in the discipline of physical diagnosis and symptomatology. He watches the daily changes of acute and the slower progress of chronic maladies. He stands by when the knife of the surgeon separates the diseased from the most vital organs, or otherwise relieves the sufferer by a critical operation. He attends in the anatomical theatre to witness the confirmation or correction of the diagnosis by the examination of the morbid structures after death. He sees the treasury of nature ransacked for all its most potent agencies to control morbid actions, after a subtle analysis of the symptoms, and with vigilance of the results.

In well-regulated hospitals, the wards are warmed and ventilated on scientific principles, every precaution is taken, by cleanliness and disinfection, to prevent the origin of the diseases peculiar to the congregation of the sick. The day nurses are, or ought to be, selected for their experience, good conduct, patience, and skill. In the night nurses, probably, most hospitals are less fortunate. The whole medical staff exhibits that which is the greatest honor of the Profession in Great Britain—a singular devotion, rewarded solely by the sense of duty done—opportunity for a more scientific observation of disease—and it may be, after prolonged labours, the appreciation of the public.

The more earnest students of medicine, in their early career, spend years in these scenes and duties, not as visitants only, but living within the walls of the hospitals,—in the atmosphere of contagion,—sometimes in apartments barely separated by lath and plaster partitions from the wards, in which may be heard night and day the moans of disease and death.

Every Profession requires its acts of sacrifice, and I may say in passing, that the victims to contagion among the students and professors of medicine, deserve their tribute of public gratitude and honor.

But I bring this period of the student's career under your review with other objects. After years of experience at home, the student visits the hospitals of the great European cities. He attends the clinique of Louis or Andral, or the great French surgeons, or watches the researches of Kölliker or Rokitsansky, or examines the admirable physical arrangements of the hospital at Bordeaux.(a)

So he passes from city to city over the whole of civilised Europe, to observe in like manner the phenomena of disease, the resources of the art, the structure and regulation of hospitals, and to note the steps of scientific diagnosis and cure.

In all this, if done in the right spirit, there is something so closely allied to that to which our Saviour himself pointed as one of the characteristics of his mission, when he answered the inquiries which the Baptist made through his disciples, that it might almost seem that the whole work of the physician was fulfilled when the picture of it was thus drawn. As a true result of the growth of science, the hospitals of Europe may, in their main features, challenge scrutiny; and, in many of the chief hospitals, there is present an order of attendants on the sick, who, by a life of religious self-devotion, add to these works of charity, of science, and of art, in the cure of the body, that effort of Christian faith for the cure of the soul which completed our Saviour's reply: "Go and show John again those things which ye do hear and see. The blind receive their sight, and the lame walk; the lepers are cleansed and the deaf hear; the dead are raised up, and the poor have the Gospel preached unto them; and blessed is he, whosoever shall not be offended in me."

I wish to convey my conviction that we lose sight of the true dignity of our art, if we are limited by the material in our charities for the cure of disease, and do not administer every act in the spirit of that example which Christ set us,

when he seemed to co-ordinate his supernal power in the relief of suffering and of sin, in the reply, "Whether is it easier to say, Thy sins be forgiven thee, or to say, Take up thy bed and walk?"

With this conviction, I would with respect and deference suggest that the arrangements of hospitals should, in all respects, be such as to exhibit the effort to cure disease in the light of an act of Christian charity, encouraging and guiding that penitence and change of life without which we are all without spiritual hope.

Such efforts are in harmony with that charity which has provided not simply healing, but a house of mercy for the penitent Magdalene; which has not only banished the jail fever from our prisons, but converted them, at least in some degree, from schools of crime to houses of reformation—with that psychology, which has removed the manacle, the scourge, the straw and chain from the cells of maniacs, and has exorcised the evil spirit by the gentleness of Christian sympathy. So, in our Hospitals, we ought to remember that almost every inmate comes thither peculiarly conscious of the realities of death and a future state. In such a house, not merely his own awe at the presence of disease and death, but everything around him should be a messenger of the Great Physician, to invite him from a life of sin to one regenerate by suffering and repentance.

Hospitals so conducted would become not merely schools in which nurses, impelled by charitable self-devotion, would be trained; but the students of the art would receive in them an impulse during their education which, co-operating with the love of science and zeal in the art already implanted, could not be without its influence on the character of the Profession.

(To be continued.)

ORIGINAL COMMUNICATIONS.

STATISTICAL INQUIRY INTO THE EFFECTS OF CHLOROFORM.

By SAMUEL FENWICK, M.D.

Lecturer on Pathological Anatomy at the Newcastle College of Medicine, (in connexion with the University of Durham.)

THERE are few subjects in Surgery of more importance than that lately brought under the notice of the Profession by Dr. Arnott respecting the mortality of operations performed under the influence of chloroform. Most Surgeons were so satisfied of its usefulness that no investigation was thought necessary; but when it is asserted that danger is not confined to the time during which the patient is insensible, but that it tends to produce injurious consequences at a subsequent period, the subject assumes an aspect of grave importance. When pursuing an investigation such as the present, we must be careful to disabuse our minds of prejudice. Whoever has been a witness of Surgical operations performed under chloroform must have experienced pleasure at the absence of suffering, and feelings of humanity are apt to prevent that fair and impartial investigation of facts so necessary to the ascertaining of truth.

The tables hitherto published both for and against the use of chloroform appear to me open to several objections. The chief of these are, that they are selected from a number of different Hospitals in various proportions, and that the effects of circumstances which we already know greatly influence the mortality of operations are not eliminated before the conclusions are drawn. In the present paper the facts are derived from one Hospital alone; and I have endeavoured, as far as I have been able, to exclude the effects of other circumstances likely to produce a difference in the mortality. In the first series are included the operations registered in the operation books of the Newcastle Infirmary from 1823 to 1843; but, as the record is imperfect, the actual period embraced is seventeen and a-half years. In the second are the operations registered since the first employment of ether; and as the use of anæsthetic agents has been general in all the more important operations since that time, these figures may be used to show any disadvantages likely to arise from the employment of chloroform.

(a) See Transactions of Manchester Statistical Society. Paper by Mr. Robertson.

1. AMPUTATIONS.

Before the use of ehloroform there were registered 225 amputations of the thigh, leg, and arm, of which 54, or 24 per cent., died. Since the use of anæsthetic agents 149 eases of similar operations have been reecorded, of which 36 died, showing also a mortality of 24 per cent.

Before, however, we can draw any eonelusion from such faets, we must earefully exelude all those eireumstances which are already known to produce an effect upon the mortality of amputations. It is, for instance, well known that amputations performed on aceount of aeidents are, on the whole, nearly twice as fatal as those required for long-standing disease. Now, if we divide the foregoing numbers into these two elasses, we shall find that before the introduction of ehloroform there were 144 pathological amputations, with a mortality of 19 per cent.; while since its employment there have been only 61, of which 13 per cent. has died; and while

of 81 traumatic amputations which took plaee in the former period 32 per cent. died, only 31 per cent. perished in the latter period. The equal mortality obtained from a general average of all amputations is thus seen to have arisen from the smaller eomparative number of operations performed for disease. If the reecords of other Hospitals were earefully examined, it is probable that the increase in the mortality of many of them would be found more apparent than real; for limbs are now *saved* which twenty years ago would have been removed without the slightest hesitation.

But we know also that the ratio of mortality varies according to the part of the limb at which the operation is performed. Thus amputations of the thigh are four times more fatal than those of the forearm, and it is therefore absurd to class them together. The following Table shows the amputations, divided according to the part of the limbs at which they were performed, with their per-eentages of mortality:—

TABLE I.

	WITHOUT CHLOROFORM.									WITH CHLOROFORM.								
	Pathological.			Tranmatic.			Total.			Pathological.			Traumatic.			Total.		
	No. of cases.	Deaths.	Mortality.	Number.	Deaths.	Mortality.	Number.	Deaths.	Mortality.	Number.	Deaths.	Mortality.	Number.	Deaths.	Mortality.	Number.	Deaths.	Mortality.
Thigh.....	50	9	18 per ct.	8	5	62 per ct.	58	14	24 per ct.	23	3	13 per ct.	11	5	45 per ct.	34	8	23 per ct.
Leg.....	74	15	20 per ct.	38	14	36 per ct.	112	29	25 per ct.	33	4	12 per ct.	46	19	41 per ct.	79	23	29 per ct.
Shoulder joint.....	..	..	..	5	2	40 per ct.	5	2	40 per ct.	1	..	..	5	2	40 per ct.	6	2	33 per ct.
Arm	11	1	9 per ct.	24	4	16 per ct.	35	5	14 per ct.	2	1	50 per ct.	18	2	11 per ct.	20	3	15 per ct.
Forearm	9	3	33 per ct.	6	1	16 per ct.	15	4	26 per ct.	2	0	..	8	..	..	10	..	..
Total.....	144	28	19 per ct.	81	26	32 per ct.	225	54	24 per ct.	61	8	13 per ct.	88	28	31 per ct.	149	36	24 per ct.

It is plain from the above table that since the employment of chloroform there has been a diminution of mortality; thus in amputations of the thigh for disease there has been 5 per cent. less death, while after accidents 17 per cent. have been restored to health, who formerly would have perished. In the pathological amputations of the leg there is a difference of 8 per cent in favour of ehloroform; and while 1 out of 3 died after the removal of the forearm for accidents in the former series of cases, no death had occurred out of 8 in the latter. The only execeptions are to be found in the traumatic amputations of the leg, and in the pathological amputations of the arm. In the former there is an excess of deaths since the

introduction of ehloroform amounting to 5 per cent., and in the latter the eases being only two in number do not warrant us in drawing any deduction from them.

I showed in a former paper (a) that the period in which persons usually sink from the shock of an amputation is within four days after its performance; that from the fourth to the twenty-first day is the usual time during which death oeecurs from phlebitis and those secondary inflammations which are generally supposed to arise from the introduction of pus into the blood. It will be interesting, therefore, to eompare the dates of deaths before and since the employment of anæsthetic agents. In table second the chances of death of each person who has suffered amputation are shown.

TABLE II.

CAUSE OF AMPUTATION	Within 4 days.		4 to 7 days.		Second week		Third week.		Fourth week		Fifth week.		Sixth week.		Seventhweek		Ninth week.		Above nine weeks.	
	Without chloroform.	With ehloroform.	Without chloroform.	With ehloroform.	Without chloroform.	With ehloroform.	Without chloroform.	With ehloroform.	Without chloroform.	With ehloroform.	Without chloroform.	With ehloroform.	Without chloroform.	With ehloroform.	Without chloroform.	With ehloroform.	Without chloroform.	With ehloroform.	Without chloroform.	With ehloroform.
Injuries of thigh	1 in 26	1 in 45	..	1 in 7	1 in 5	..	1 in 4	1 in 6	..	..	..	..	..	..	..	..	..	..	..	..
Ditto leg	1 in 95	1 in 88	..	1 in 39	1 in 85	1 in 12	1 in 7	1 in 11	1 in 26	1 in 32	1 in 25	1 in 31	..	..	..	..	1 in 30	..	..	1 in 11
Ditto arm .....	..	..	..	1 in 26	..	..	..	1 in 25	1 in 8	..	1 in 21	..	..	..	..	..	..	..	..	..
Amputation of shoulder-joint	1 in 25	..	..	1 in 5	..	..	..	..	1 in 4	..	..	..	..	..	..	..	..	..	..	..
Diseases of thigh and knee	1 in 25	..	1 in 48	..	1 in 23	..	..	1 in 11	1 in 15	1 in 21	1 in 42	..	..	..	..	..	..	..	..	..
Ditto leg and foot	1 in 74	..	1 in 36	1 in 25	1 in 14	..	1 in 33	..	1 in 64	1 in 24	1 in 63	1 in 23	1 in 62	..	1 in 61	..	1 in 60	..	..	..
Ditto arm & elbow	..	..	..	..	..	..	1 in 11	..	..	..	..	..	..	..	..	..	..	..	..	..
Ditto forearm ..	1 in 9	..	1 in 8	..	1 in 7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

(a) Report of Surgical Operations, Monthly Journal of Medical Science, October, 1847.

There can be no doubt from this table that the danger from shock has been partly decreased since the use of chloroform. In the former series it is seen that a person was most likely to sink from this cause after the injuries of the thigh, and that 1 in every 2·66, or 37 per cent., of those operated on had perished within the first 4 days, while only 1 in 4·5, or 22 per cent., sunk in the same time in the latter period. In amputations of the leg there has been an increase in mortality of 1 per cent. during the first four days, when the operation has been performed for accidents since the use of chloroform; but this may readily be accounted for by the greater number of double amputations that are included in this series. Before the use of chloroform deaths had occurred from shock in the amputations of every part, excepting in those performed upon the arm, whereas since its employment none have sunk from this cause, excepting when it was required for severe accidents of the thigh and leg. Such observations are borne out by the experience of most operators. It seems generally allowed that the use of anæsthetic agents greatly lessens the shock of an amputation, and this means consequently enables us to operate under circumstances where without it we should dread to employ the knife. Formerly the brandy bottle was an invariable accompaniment to the amputating case, now it is rarely necessary to stimulate the patient. Formerly most Surgeons declined to remove a limb after an accident until reaction had taken place, now many do not hesitate to operate in the stage of collapse.

But the accusation that has lately been brought against chloroform is, that it increases the tendency to pyæmia, and the other secondary diseases that cause the chief mortality after amputations. In table second it is seen that in injuries of the thigh, in the former period, 1 in 5 was lost from the 4th to the 14th day, and 1 in 4 in the third week; but in the latter period only 1 in 7 died from the 4th to the 14th day, and 1 in 6 from the 14th to the 21st day. In amputations of the leg for injuries, although the general average of mortality appeared to have increased since the introduction of chloroform, a less amount of death has really taken place between the 4th and 21st day. Thus in the former period 1 in 8·5 in the second week, 1 in 7·5 in the third week, and 1 in 26 died in the fourth week; while in the latter period 1 in 9·7 perished between the 4th and 14th day, 1 in 11·6 in the third week, 1 in 32 in the fourth week, and 1 in 31 in the fifth week. The cause of death in 14 cases is recorded as follows:—

Five died of pyæmia, one of erysipelas, one of fever, one of hæmorrhage, one of pneumonia, one of gangrene, two of tetanus, and two of hectic. We unfortunately have not the means of comparing this list with the causes of death in this Hospital before the use of chloroform; but if we compare it with the numbers who died in the Glasgow Infirmary we shall find that there is no foundation for the opinion that chloroform tends to produce pyæmia. In the list I have just given there are only six cases of pyæmia and visceral inflammation out of fourteen deaths, forming forty-two per cent. of the whole; while in the Glasgow report, if we in like manner exclude those cases that died from shock, we find sixty-one per cent. were cut off by these diseases. It will then, I think, be sufficiently apparent that if we take the results of amputation as a test of the effects of chloroform upon operations in general, we shall discover no reason to regret the employment of this agent.

Although the general average of deaths is the same in both cases, this has arisen from modern Surgical improvements, and where the figures are fairly examined a less amount of death is apparent since the use of chloroform. The danger from shock has been greatly lessened in amputations from accidents, and has been altogether lost in those performed for disease; and, although we cannot positively state that secondary inflammations have decreased since its employment, the mortality has been lessened from the fourth to the fourteenth day, and we have no evidence in support of a contrary supposition.

(To be continued.)

PENSIONS FOR THE FAMILIES OF DOCTORS DYING DURING TYPHUS EPIDEMICS.—The Austrian Government has determined that the same pensions which are now paid to the families of Medical men, officially called upon to attend cholera patients, and who die during such attendance (whether of the disease or not), shall in future also be paid when death takes place during official attendance in typhus epidemics.

ON PLASTIC OPERATIONS

FOR THE

RESTORATION OF THE LOWER LIP,

AND FOR THE RELIEF OF SEVERAL DEFORMITIES OF THE FACE AND NECK.

By THOMAS P. TEALE,
Surgeon to the Leeds General Infirmary.

THERE is, perhaps, no department of Surgery in which the practice of the present day contrasts more favourably with that of the age immediately preceding than the plastic.

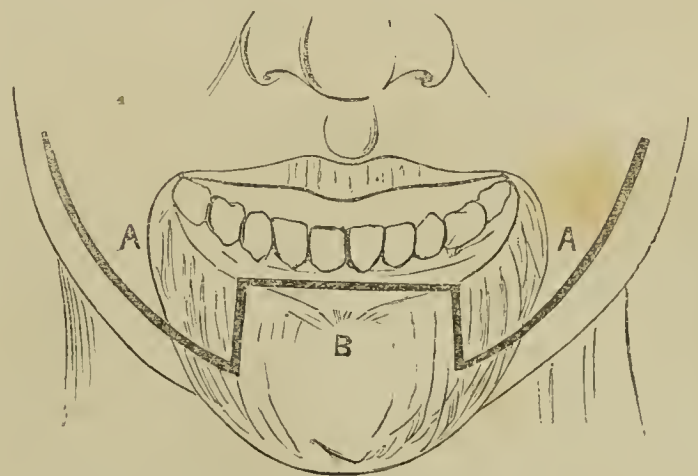
In the hope of advancing, in some degree, this department, I invite the attention of the Profession to the following series of cases in which the lower lip has been restored, and several deformities of the face and neck have been removed or lessened.

In the Transactions of the Royal Medical and Chirurgical Society for 1855, I was honoured by the publication of a paper on a Plastic Operation for the Restoration of the Lower Lip, which was exemplified by three cases in which the operation had been performed. I now propose to relate these cases more fully, and some others that have since occurred to me. Each case will be illustrated by an engraving, showing the condition of the patient both before and after operation.

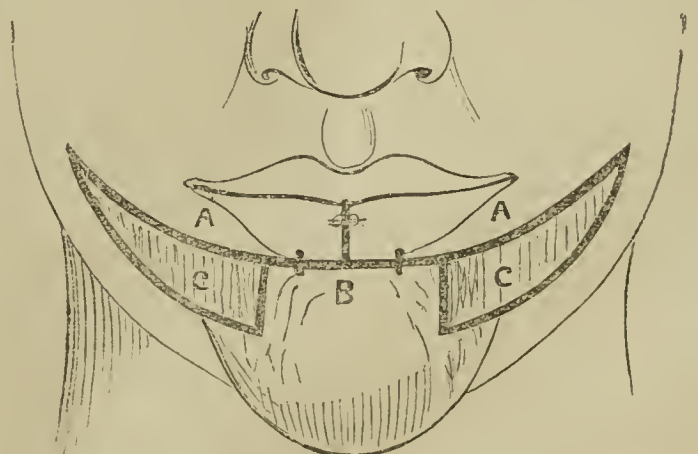
To prevent repetition in the relation of the cases, I shall first describe the several operations to which these patients have been subjected.

1. *Operation for the Restoration of the Lower Lip.*—The usual cause which renders this operation necessary is the contraction following deep and extensive burns of the neck. As contraction advances, the chin becomes drawn down to the sternum; the mucous membrane of the lower lip is turned outwards, and drawn to the lower edge of the chin; the incisor teeth of the lower jaw gradually assume a horizontal direction, and are drawn much in advance of those of the upper jaw. In extreme cases the lower incisors take a direction almost horizontal. The tongue sometimes lolls out of the mouth, and the saliva is constantly dribbling away.

To relieve this sad condition the following operation is proposed:—



AA. Lateral flaps formed of everted lower lip and cheek. B. Central portion of everted lower lip.

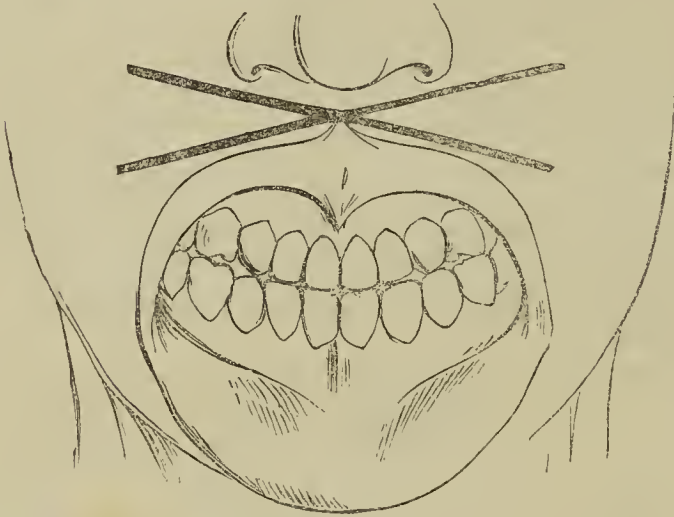


A. A Lateral flaps united in the median line, above the central portion of everted lower lip B. CC Exposed surfaces left to granulate.

Two vertical incisions, about three-quarters of an inch in extent, are made through the everted lip down to the bone. These incisions are so placed as to divide the upper portion of the everted lip into three parts—the middle being equal to one-half of the natural breadth of the lip, while the two lateral portions are each equal to one-fourth. From the lower end of each vertical incision the knife is carried in a curving direction outwards and upwards to a point situated about one inch from the angle of the mouth opposite to the second molar tooth of the upper jaw. The two flaps thus marked out and deeply incised are then separated from the bone, the mucous membrane uniting them to the alveoli being freely divided. Lastly, a bare surface is made along the alveolar border of the middle portion of the everted lip. The incisions being now completed, the lateral flaps are drawn upwards and united by twisted sutures to each other in the median line, and to the middle portion of the everted lip at their inferior border. In this way a new lip is, as it were, built upon the middle portion of the old one.

2. *Operation for Restoration of the Upper Lip.*—The process of cicatrization sometimes reduces the upper lip to a narrow transverse band, drawn up close to the nose, leaving the upper teeth and gums exposed. This deformity interferes with the perfect closure of the mouth, and causes an unseemly aspect.

The contracted upper lip in the fifth case of the present series was restored to its natural size and function by the following operation:—



A crucial incision is made (*en saltire*), having its point of intersection immediately below the septum of the nose. Each limb of this incision is about one and a half inch in length. The two limbs on each side diverge moderately as they pass outwards to the cheek, and enclose between them an acutely angular flap of skin and other tissues. This crucial incision is extended deeply through the entire substance of the imperfect lip and the cheeks. The parts implicated in the incisions are then freely loosed from their attachments to the superior maxillary bone by the knife being passed upwards between the bone and the remnant of lip. The parts being thus detached, the two lateral angular flaps are drawn across the median line, dovetailing with each other, and thereby increasing the depth of the lip at the expense of its breadth. In this position the flaps are retained by one pin and twisted suture.

3. *Operation for Relieving Contractions of the Neck.*—In some cases the contraction of the neck is so great that the head is bowed forwards, the chin drawn to the sternum, and the lateral movements of the neck greatly restrained. These evils may generally be much mitigated, and sometimes completely relieved by plastic surgery.

In 1839, Mr. Carden (a) of Worcester, operated upon a girl aged fourteen years, who was much deformed by a burn, which occurred seven years before. The movements of the head were much restricted; the mouth was permanently open; the tongue protruded; the lower incisors projected horizontally, and there was constant dribbling of saliva. A transverse incision was made throughout the entire extent of cicatrix in front of the neck. The chin was then drawn upwards, and

every tense band connected with the cicatrix was divided until the head was relaxed nearly into its natural position. A flap of skin, three inches long and two and a half inches wide, was detached on each side from over the clavicle and chest. These were raised and united in front of the throat. The degree of improvement effected in this case, and tested by the lapse of four years, was highly gratifying.

Subsequently to the performance of Mr. Carden's operation, a similar proceeding was adopted in several cases, with great success, by Dr. Mütter, (a) of Philadelphia.

I have performed this operation in seven cases since August 1848, and have witnessed it in some others by my colleagues at the Leeds Infirmary.

In all the cases which I have seen there was a marked and most satisfactory improvement in the movements of the head and neck. The displacement of the lip was also in a greater or less degree mitigated by the operation on the neck, but in several of the cases this particular deformity remained to such an extent as to render a special operation for the restoration of the lower lip subsequently necessary.

In these autoplasmic operations on the neck it is of essential importance, as stated by Dr. Mütter, that the incision of the scar should extend from sound skin on one side of it to sound skin on the other, and that every band of adventitious fibrous tissue beneath the scar should be divided until the bottom of the wound discloses a loose healthy cellular tissue.

The flap to be transplanted may be taken from any neighbouring portion of the neck, shoulder, or thorax, where healthy skin can be obtained. In one case, from lack of sufficient sound skin, I was under the necessity of including cicatrised skin in the flap.

The very accurate adaptation of the flap by suture should be avoided, as great tension renders the flap liable to slough. It is, therefore, better to be content with attaching the flap at its free extremity and one of its borders, and to leave the other border loose. Much may be done afterwards by careful dressing, during the healing process, to rectify any separation of the parts.

As far as I have observed, the transplanted flap rarely unites to the edges of the wound by the "first intention." All that is usually accomplished in the first instance is an organic union of the cellular surface of the flap to the parts beneath. The more close approximation of the edges of skin is obtained during the processes of granulation and healing.

When the bands of scar are so numerous or extensive as to require more flaps of skin than one to be inserted, it is better to repeat the operation at separate times. I saw much constitutional disturbance in one case from the operation having been conducted on too large a scale in the first instance.

After the lapse of some months the transplanted portion of skin is generally found to have yielded to a process of stretching, so as to exceed considerably its original dimensions.

4. *Operation for Restoration of the Lower Eyelids.*—Eversion of the lower eyelid, its tarsal border being drawn far down the cheek, is a frequent result of contracted scars. Besides the revolting appearance caused by permanent ectropion, the patient suffers habitually from a low form of inflammation of the conjunctiva and cornea, in consequence of these parts having been habitually deprived of the protection of the eyelid.

The eyelid in such cases may frequently be restored to its natural position by the following operation:—

An incision is made across the cheek parallel to the displaced tarsal border, about three lines below it. The portion of skin between this incision and the edge of the tarsus is freely dissected upwards, along with the whole substance of the eyelid as far as the edge of the orbit. The eyelid thus loosened is placed in its natural position, and the chasm left thereby is filled by a piece of skin transplanted from the side of the face. This operation succeeded perfectly in the right eye of William Bradby, the subject of the fifth case. It was attempted with only partial success in both eyes of John Leach, the subject of the fourth case. The want of complete success in this instance was owing to the total absence of any portion of sound skin in the neighbourhood; on which account, I was obliged to transplant on each side a piece of cicatrix, which, having only low vitality, sloughed to a considerable extent. In two other cases, not included in this series, the operation succeeded perfectly.

5. *Restoration of the Upper Eyelids.*—From the contraction

(a) Transactions of Provincial Medical and Surgical Association, Vol. xii.

(a) British and Foreign Medical Review, April, 1845.

of scars of the upper eyelids and forehead, the upper lids are sometimes everted, and their tarsal border is bound firmly to the superciliary ridge.

A plastic operation similar to that for the lower lids may be practised with advantage in this deformity. In the case of John Leach, to be hereafter related, I operated on each of the upper lids, by making a transverse incision parallel to the tarsal border, at a distance of three lines above it. The substance of the eyelid was then dissected downwards and freely loosened from the edge of the orbit. The upper eyelid being thus restored to its natural position, the vacuity was filled by a piece of skin transplanted from the temple. In both eyes the operation succeeded.

(To be continued.)

COMPARATIVE EFFECTS OF AMYLENE AND CHLOROFORM IN THE SAME PERSON.

BY H. W. SHARPIN.

Surgeon to the Bedford General Infirmary.

EBENEZER FULLER, aged 8, admitted into the Bedford General Infirmary, May 18, 1857, with an injury to the thumb, such as rendered its removal necessary.

Amylene was administered; the patient breathed it for about a quarter of an hour, it produced an apparent state of unconsciousness, but without insensibility to pain; its inhalation occasioned no spasm of the glottis, and was attended with no struggling. It at first increased the action of the heart, but soon the frequency and power of the pulse were so diminished that finally it became imperceptible for a few moments, and the syncope was alarming.

The application of the knife roused the patient, and the pulse could again be felt, but I did not consider it prudent to continue the inhalation; and desirous of comparing the effect of chloroform in the same case, left the operation till the next day. The patient very soon came to himself, and no sickness ensued.

The inhalation of chloroform on the next day produced unconsciousness and insensibility to pain in about three minutes; it caused no spasm of the glottis, but was attended with some degree of struggling, the frequency of the pulse was at first increased, but when insensibility was induced was about the same as before commencing the inhalation.

The operation was unattended with any demonstration of pain. The little patient very soon became conscious, but before the dressing of the stump was completed, vomiting took place, and the feeling of sickness continued for some time afterwards.

Bedford, May 30, 1857.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

HOSPITAL NOTES.

FALSE ANEURISM OF THE RADIAL ARTERY.

An interesting case of false aneurism has recently been treated by Mr. Cock, in Guy's Hospital. The patient, a lad aged 19, had received a punctured wound of the forearm, about three inches above the wrist, by which the radial artery had been opened. The injury was done by a piece of steel, and had occurred about six weeks before his admission into the Hospital. Profuse bleeding had occurred at the time, but had been arrested by firm pressure, and the wound had healed. When admitted there was an aneurismal tumour of about the size of a blackbird's egg. The measure of treatment at first tried was that by pressure, firm rolls of plaster being bound down over the course of the brachial. This caused a small slough of the skin, and was on that account desisted from. Mr. Cock now determined to employ the ligature, and the tumour was accordingly cut down upon, and the two ends of the vessel secured. All did well, and the wound quickly healed. The case well shows the inexpediency of attempting

to arrest profuse arterial bleeding from a punctured wound by the compress. To have cut down on the vessel, and ligatured its ends, in the first instance would, doubtless, have saved all the subsequent trouble.

USE OF CHLOROFORM IN RETENTION OF URINE.

An intemperate cabman, aged 52, was admitted into a medical ward at Guy's a few months ago, on account of chest symptoms. It appeared that he had had gonorrhœa twelve years before, and had ever since had more or less difficulty in passing his water. After having been in the Hospital nearly three weeks, he was seized with retention of urine. The dressers and House-Surgeon made patient and repeated attempts to pass a catheter, but without result. There was little doubt that the stricture was a permanent one, which had become closed by inflammation. On February the retention had been complete for two days, the symptoms were becoming very urgent, and Mr. Cooper Forster was accordingly called to see him. Opium had been most freely given. Having failed in persevering attempts to introduce a No. 2 catheter, Mr. Forster determined to administer chloroform, and then, if needful, to puncture the bladder by the rectum. When completely insensible, another trial was made with a No. 3, which now passed most readily. We cite this case as important, because it proves beyond dispute the influence of the anæsthetic state in relaxing an otherwise impermeable stricture. An opiate treatment had been fairly tried before, and had failed, and the catheter had also been found useless in the hands of several well-practised Surgeons. The plan of administering chloroform in cases of obstinate stricture and retention is one in wide use, both in Hospital and private practice; but, as it is not yet in such general favour as it deserves to be, we have thought that so pointed an example of its advantages might be worth bringing before our readers.

MELANOSIS OF THE EYEBALL OF SLOW PROGRESS.

An unusual case presented itself in Mr. Critchett's practice at Moorfields on Tuesday last. It was that of an old man of about 65, whose right eye had been lost by some deep-seated disease for the past twelve years. He gave a clear account of the sight having failed without pain and without any visible inflammation. About four years ago a tumour began to form beneath the globe, which projected externally under the lower lid. It had increased slowly and with very little pain, and he still retained the appearance of robust health. When he applied at the Hospital the globe was pushed up under the upper lid, the cornea being destroyed by ulceration. Beneath the globe was a large firm lobulated growth, which had adhesions to the edge of the orbit, and which distended the lower lid. There could be no doubt from the general aspect of the disease that it was cancerous, although the history and the man's state of health did not imply any very virulent form of malignancy. It was determined to remove it, and the operation was performed under chloroform the same day. Mr. Critchett extirpated the whole contents of the orbit, dividing the attachments of muscles, &c., by means of scissors, and forcibly separating the cellular adhesions with the finger. The bleeding which followed was very much less than we have often seen when the knife had been used, and no measures beyond plugging with sponge were necessary for its arrest. The tumour proved to be melanosis. The disease had evidently commenced within the globe, and had perforated the sclerotic in its posterior and lower part.

We may add, whilst on this subject, respecting a case (a) in which nearly five years ago Mr. Bowman removed an eyeball on account of melanosis, that the man is still in good health. In it the disease was confined to the globe itself, but there occurred afterwards a spitting of blood, which occasioned fears that secondary deposits in the lung had taken place. The man afterwards attended Dr. Peacock at the City Hospital for Chest Diseases, on account of his pulmonary symptoms, and got entirely rid of them. There had never been any physical signs of disease.

LARGE UTERINE POLYPUS, PROBABLY OF MALIGNANT NATURE.

Dr. Barnes has now under his care, in the Metropolitan Free

(a) For details respecting it, see *Medical Times and Gazette* for May 21, 1853.

Hospital, a case exemplifying one of the least usual of the forms of uterine polypus. The patient is a woman of about 45, miserably ill looking, her cachexia being a very type of that known as the malignant. Her history is, that about seven years ago attacks of profuse bleeding first began to occur, and that they have continued with some intermissions ever since. It is during the last year only that she has so much lost health and flesh. The discharge has been constant and fetid for about six months past. On examination a large polypoid growth, the size of two fists, was found in the vagina. Its pedicle passed up the cervix uteri, and was about the thickness of three fingers. In the uterus itself was a large mass, much softer in texture than the vaginal one. The lips and cervix of the uterus were healthy. The lobulated surface of the vaginal tumour was ulcerated in several parts, bled readily on being touched, and the discharge from it had an abominable fetor. The uterus could not be felt to be enlarged on examination through the abdominal walls. Notwithstanding the probability that the disease was malignant, and the certainty that there existed within the uterus a mass of considerable size which could not be got away, it was determined in consultation to apply a ligature to the constricted part and remove the depending growth. It was this chiefly which caused irritation and exhaustion, and very possibly much of that within the uterus might slough away after the use of the ligature. Before the operation the case was carefully examined by Mr. Chance and Mr. Hutchinson, who fully concurred in this opinion. The ligature was applied by means of a Gooch's double canula on Wednesday last. We shall report the conclusion of the case at a future time. It reminded us strongly of one in which Dr. Oldham recently adopted the same measures in Guy's, and also of a third under the care of Mr. Hutchinson some months back, at the Metropolitan Free. In the latter the pendulous polypoid mass in the vagina was on these occasion removed, and was always rapidly reproduced.

REMOVAL OF THE TONGUE FOR CANCER.—USE OF THE ECRASEUR.

A case of great interest was submitted to operation by Mr. Simon, in St. Thomas's, three weeks ago. The problem was, how safely to remove almost the entire tongue. The patient was an elderly man, in fair health, in the centre of whose tongue two large cancerous ulcers had existed for some time. The posterior one extended as far back as the commencement of hinder third of the organ. The operation proposed being one from which, at the best, only temporary benefit could be expected, it was felt to be additionally undesirable to run much risk to life in its performance. After much deliberation, Mr. Simon decided to employ the ecraseur, hoping thus to avoid the danger of bleeding. The patient having been placed under chloroform, the chain of the instrument was drawn horizontally through the body of the organ, by means of a large needle. In adjusting the handle and tightening the chain, however, the substance was found so soft that the latter tore its way through it at once, before the working of the crank had been commenced. Very little bleeding resulted, and having been thus disappointed in the instrument, Mr. Simon determined to finish the excision with the knife. A ligature was placed as tightly as possible round the undivided lower two-thirds of the tongue, which was then cut away just in front of it. The ligature slipped, and some bleeding followed. At this juncture, chiefly as it seemed afterwards from the effect of the chloroform, the man passed into complete syncope. For a few minutes he had all the appearance of being dead, and it was feared that the wound was bleeding profusely into the pharynx. Mr. Simon acted with great energy and promptness, having the man at once placed on the floor, and dragging forwards the tongue by means of a vulsellum, so as to permit of the actual cautery being applied. Several ligatures were subsequently applied, and partly by their means, and partly by the use of the cautery, the bleeding was, after much trouble, entirely arrested. The quantity of blood really lost had not been very great, and when the man recovered from the faint, his aspect was much better than might have been expected. Some little secondary hæmorrhage afterwards occurred, but it was arrested, and the man has progressed since remarkably well. We do not recollect to have ever before seen so large a portion of the tongue excised, and in many, in which much smaller ones were removed, the trouble with bleeding was very great indeed.

THE PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

SALFORD ROYAL HOSPITAL.

CANCER OF UPPER JAW—REMOVAL—DEATH.

(Under the care of Mr. THOMAS WINDSOR.)

Susannah Ashton, aged 42, servant; born in Cheshire tall; florid; healthy-looking in appearance; married; has had three children, all now dead; one of phthisis, one of measles, one of hooping-cough. Her father died when 80 years old, and her mother, 73 years old, is still in good health. Had two brothers and three sisters, all still alive.

Last Christmas-day she was told by her mistress that her cheek was swollen, and about the same time she had a bad hoarseness, which afterwards abated as the swelling increased. For about a week before Christmas her gums had ached a good deal, and were somewhat swollen. For some time the swelled cheek remained painless, but has latterly sometimes ached; the tumour has gradually increased; her general health has been rather disordered; occasionally she has attacks of febricula.

Present state.—The right cheek is much distended by a tumour, evidently chiefly formed by a development of the jaw itself. This tumour is hard, perfectly unyielding, extending from the edge of the orbit to the alveolar arch, pushing the nose somewhat towards the left side; in the lower part of the cheek is a somewhat elastic swelling, about the size of a small marble, and attached to the jaw. The skin is everywhere moveable, and unaltered in colour. The eye is perfectly normal. There is epiphora on the right side, but the tears seem healthy. The right nostril appears to be quite closed by a fleshy mass, and discharges a considerable quantity of somewhat fetid pus. In the fossa, above the molar teeth, there is an opening, irregular in form, with soft, spongy edges, nearly large enough to admit the little finger; a probe passes freely through it into the antrum, and by this means we find the cavity to be empty, but the interior of the walls covered with soft granulations. The teeth in front and on the left side are in pretty good condition; she had one on the right side extracted about February last; it came out very easily, but bled freely afterwards; she has had one or two drawn since; they came out just as easily, but did not bleed so much. Extending over nearly the whole of the right half of the palate is an ulceration, nearly oval in shape, with an irregular and rather elevated surface, and of a dirty greenish-grey appearance; the probe passes easily through broken-down bone into the antrum. That portion of the right palate which is not ulcerated is thickened, and of a darkish hue. The gums on the same side are thickened and spongy. Zygomatic fossa appears normal. Some little time back, she had a good deal of difficulty in opening her mouth, but can open it freely now. Behind the ramus of the lower jaw, on the right side, is an enlarged gland, and another just behind the angle. Both are painless, and, she thinks, are somewhat changeable in size.

April 15th, 1857.—Excised the superior maxilla; employed the incision from a little internal to the angle of the mouth, to about half an inch behind the outer angle of the eyelids; passed the chain saw through the speno-maxillary fissure, and sawed through the middle of the molar bone; sawed in a similar manner through the nasal process of the upper jaw; sawed through the alveolar process with a common saw, and cut through the palate process with the bone forceps. On then depressing the bone, it broke into several pieces; taking hold of the orbital plate so as to depress it, I cut through the superior maxillary nerve in the fossa, then removed the portions of bone separately. The tuberosity of the palate bone appearing diseased, I snipped it off, and with it removed the pterygoid process of the sphenoid. One or two points, which presented a suspicious appearance, were then touched with the actual cautery; the hæmorrhage was very trifling.

The wound was left open for two hours, and then closed with the twisted suture; lint dipped in cold water to be constantly applied. R Tr. opii ʒj, stat. sum.

On examination of the parts removed, the bone was found softened, easily breaking down under pressure, and infiltrated with a tissue, which, collected here and there in larger masses, much resembled broken-down brain matter: under the micro-

scope, cells of almost every shape—oval, round, fusiform, etc.—some with tails, one or more; some with more than one nucleus; the nuclei large, one-third the size of the cell, or even larger.

April 16.—Easy; has slept well; pulse ealm.

18th.—Around the angle of lower jaw considerable thickening, painful on pressure, with slight redness of integument. Removed three upper pins; wound united; pulse 96. Ordered some tr. ferri mur. and a chloride of soda gargle.

22nd.—Diffuse inflammation of cellular tissue gradually spread over the whole of the neck; it was punctured, ung. hydr. and poultices applied; to-day there is an erysipelatous blush over the forehead, but the neck seems rather better; paralysis of cheek seems much less.

24th.—Erysipelas of the whole face; pulse 104; takes wine, brandy, ferri mur., etc.

26th.—Erysipelas of face seems to be disappearing; neck very much better; the redness and hardness have nearly disappeared; paralysis entirely gone.

28th.—Face and neck appear better; sitting up in bed; says she feels better. In the evening delirium came on, followed the next day by coma, with a black tongue, very rapid, weak pulse, etc.; and at 11½ p.m. she expired. No examination allowed.

NOTES AND QUERIES.

He that questioneth much shall learn much.—*Bacon.*

No. 206.—BULLOCK'S BLOOD.

What gave rise to the notion that bull's blood is poisonous, and how much truth is there in the notion?

Suffolk, May 20.

No. 207.—QUININE AND QUINOIDINE.

Will some of your readers, who have made comparative trials of these two preparations, inform us of the result? If the quinoidine be really as good as quinine, the saving in our charities would be very great.

May 19.

A COMMITTEEMAN.

No. 208.—FISH-OIL.

I found the following indirect testimony to the value of fish oil in the treatment of cachectic states of the constitution in a work I have just been reading on Siberia. It may not, perhaps, be unworthy of a corner in your Journal. Raw fish is a common diet in Siberia. I am, etc.

Farnham.

ROBERT OKE CLARK.

"The Berezovians also consider raw fish to be the most efficacious means of curing chronic diseases, and in cases of any one suffering from them a long time, losing strength and gradually declining, and the malady baffling all Medical care, the patient is usually taken to the sea-shore, and there fed on raw fish, and frequently brought home in perfect health. I have myself seen an invalid whose recovery had been despaired of, and who was given up by the Medical men, but who, after sojourning for several months on the sea-coast, and using the raw fish diet, had completely recovered his health."

No. 209.—MEDICAL BARONETS AND KNIGHTS.

Being desirous of obtaining a complete list, if possible, of Medical Baronets and Knights, it would greatly oblige if you, when space permits, would insert the enclosed list, which being imperfect, perhaps you or some of your subscribers would be kind enough to give me as many more names as possible, stating, when possible, the date of birth and of death, whether Physician or Surgeon, Baronet or Knight, and anything of interest concerning them. The dates in some cases I have been unable to find; so that, if these also were supplied, they would be very acceptable.

A tolerably complete list would perhaps be of some interest to others as well as to myself. I am, etc.

Regent's Park, May 26, 1857.

H. L. MAYSMOR.

N.B.—Baronets and Knights of the United Kingdom only to be given (including the Hanoverian order).

Adams, Sir William, Knt., Oculist Extraordinary to the Prince Regent.

Ainslie, Sir Whitelaw, Knt., M.D. (H.E.I.C.S.) (Dead).

Aldis, Sir Charles, Knt., M.D. (Living.)

Alston, Sir Edward, Knt., M.D.; President of the College of Physicians. Died, 1669.

Anderson, Sir James Eglinton, Knt., M.D.; formerly Physician to the Viceroy in Ireland. Born, 1788; died, 1856.

Annesley, Sir James, Knt.; President of the Medical Board of Madras. (Dead.)

Balfour, Sir Andrew, Knt., eminent Physician and Botanist. Born, 1630; died, 1694.

Bishop, Sir William, Knt., M.D.

Baskerville, Sir Simon, Knt., M.D.; Physician to James I. and Charles I.; President of the College of Physicians, London. Born, 1573; died, 1641.

Bardsley, Sir James Lomax, Knt., M.D. (Living.) Born, 1801.

Blizard, Sir William, Knt.; Surgeon to the London Hospital. Born, 1742; died, 1835.

Brodie, Sir Benjamin C., Bart.; Serjeant-Surgeon to William IV. and Queen Victoria. Born, 1783. (Living.)

Burnett, Sir William, Knt., M.D.; Physician in Ordinary to William IV. Born 1779. (Living.)

Blane, Sir Gilbert, Bart., M.D.; Physician in Ordinary to George III. and George IV. Born, 1749; died, 1834.

Bell, Sir Charles, Knt.; Surgeon to the Middlesex Hospital. Born, 1778; died, 1842.

Ballingall, Sir George, Knt., M.D., Surgeon to Queen Victoria and Duchess of Kent, for Scotland. Died, 1855.

Baker, Sir George, Bart., M.D., Physician to George III.; President of the College of Physicians. Born, 1721; died, 1809.

Baker, Sir George, Knt., Surgeon in Ordinary to Queen Elizabeth. Died, 1599 (?).

Bannerman, Sir Alexander, Bart., M.D. Died, 1770.

Browne, Sir Thomas, Knt., M.D. Born, 1605; died, 1682.

Browne, Sir William, Knt., M.D., President of the College of Physicians. Born, 1692; died, 1774.

Beatty, Sir William, Knt., M.D., Physician to Her Majesty's Fleet and Greenwich Hospital. Died, 1842.

Blicke, Sir Charles, Knt., Surgeon to St. Bartholomew's. (Dead.)

Blackmore, Sir Richard, Knt., M.D., Physician in Ordinary to William III. Died, 1729.

Boys, Sir William, Knt., M.D. (Dead.)

Barry, Sir David, Knt., M.D. (Dead.)

Baynes, Sir Thomas, Bart., M.D. Died, 1681.

Butts, Sir William, Knt., M.D.; Physician to Henry VIII. Died, 1545.

Cooper, Sir Astley Paston, Bart., Serjeant-Surgeon to George IV., William IV., and Queen Victoria. Born, 1768; died, 1841. Surgeon to Guy's Hospital.

Chapman, Sir J., Knt. (Dead.)

Carlisle, Sir Anthony, Knt.; Surgeon Extraordinary to the Prince Regent. Born, 1768; died, 1840. Surgeon to Westminster Hospital.

Clark, Sir James, Bart., M.D.; Physician to the Queen and Prince Albert. Born, 1788. (Living.)

Clark, Sir John, Knt., Surgeon, R.N. Dead.

Clarke, Sir Charles Mansfield, Bart., M.D. Born, 1782. (Living.)

Clarke, Sir Arthur, Knt., M.D. Born, 1778. (Living.)

Crampton, Sir Philip, Bart.; Surgeon in Ordinary to the Queen in Ireland. Born, 1779. (Living.)

Carswell, Sir Robert, Knt., M.D.; Physician to the King of the Belgians. (Living.)

Chambers, Sir William Frederick, Knt., M.D., Physician to William IV. and Queen Victoria. Born, 1786; died, 1855.

Croft, Sir Richard, Bart., M.D. Died, 1818.

Crichton, Sir Alexander, Knt., M.D., Physician in Ordinary to the late Emperor of Russia, and to the Household of the late Duke of Cambridge. Born, 1763; died, 1856.

Crichton, Sir Archibald William, Knt., M.D., formerly Physician to the Emperor of Russia. Born, 1791. (Living.)

Chermside, Sir Robert Alexander, Knt., M.D., Physician Extraordinary to the Duchess of Kent, and Physician to the Embassy at Paris. (Living.)

Cooper, Sir Henry, Knt., M.D. Born, 1807. (Living.)

Dundas, Sir William, Bart. Born, 1777. (Dead.)

Dundas, Sir David, Bart., Serjeant-Surgeon to George III. Died, 1826.

Davies, Sir David, Knt., M.D., Domestic Physician to William IV. and Queen Adelaide. Born, 1793. (Living.)

Dobson, Sir Richard, Knt. (?)

- Dickson, Sir David James Hamilton, Knt., M.D., Inspector of Hospitals and Fleets. Died, 1850.
- Dick, Sir Alexander, Knt., M.D., President of the College of Physicians, Edinburgh. Born, 1703; died, 1785.
- Downie, Sir Alexander Mackenzie, Knt., M.D. Died, 1852.
- Doratt, Sir John, Knt., M.D. (Living.)
- Darwin, Sir Francis Sacheverell, Knt., M.D., Deputy-Lieutenant of Derbyshire. Born, 1786. (Living.)
- Duncombe, Sir Saunders, M.D., introducer of sedan chairs in the year 1645.
- Duncan, Sir William, M.D. (Living in 1754.)
- Douglas, Sir Alexander, Bart. of Nova Scotia. A Physician of great eminence.
- Ellis, Sir W., Knt. (Dead.)
- Eyre, Sir James, Knt., M.D., Mayor of Hereford in 1829, 1830. Born, 1792. (Living.)
- Ent, Sir George, Knt., M.D., President of the College of Physicians. Born, 1604; died, 1689.
- Earle, Sir James, Knt., Surgeon Extraordinary to George III. Born, 1745; died, 1817.
- Elliot, Sir Thomas, Knt. Flourished in the fifteenth century.
- Fellowes, Sir James, Knt., M.D., Deputy-Lieutenant of Hants. Born, 1772. (Living.)
- Forbes, Sir John, Knt., M.D., Physician to the Queen's Household, and Physician Extraordinary to Prince Albert. Born, 1787. (Living.)
- Faulkner, Sir Arthur Brooke, Knt., M.D. Died, 1845. Was Physician to the Forces.
- Floyer, Sir John, Knt., M.D. Born, 1649; died, 1734.
- Fife, Sir John, Knt., Surgeon, twice Mayor of Newcastle. Born, 1793. (Living.)
- Farquhar, Sir Walter, Bart., M.D., Physician to the Prince Regent. Born, 1740; died, 1819.
- Franklin, Sir Richard, Knt., M.D. Died, 1845.
- Forbes, Sir Charles Fergusson, Knt., M.D. Died, 1851 or 1852.
- Fitzpatric, Sir Jeremiah, M.D., Inspector-General of Health of His Majesty George III.'s Land Forces.
- Fraser, Sir Alexander, Knt., Chief Physician to Charles I.
- Gilpin, Sir Joseph Dacre Appleby, Knt., M.D. (Dead.)
- Garth, Sir Samuel, Knt., M.D., Physician in Ordinary to George I. Died, 1718.
- Grey, Sir Thomas, Knt., M.D. (Dead.)
- Gibbes, Sir George Smith, Knt., M.D. Died, 1851.
- Grant, Sir James Robert, Knt., M.D., Deputy-Lieutenant of Cumberland in 1852. Born, 1773. (Living.)
- Gibney, Sir John, Knt., M.D. Died, 1835.
- Gaskoin, Sir Samuel, Knt., Surgeon to George IV.'s household.
- Home, Sir Everard, Bart., Sergeant-Surgeon to George III., and Surgeon to St. George's Hospital. Born, 1746; died, 1832.
- Harvey, Sir Ludford, Knt., Surgeon to St. Bartholomew's. (Dead.)
- Hall, Sir John, Knt., Inspector-General of Hospitals. Born, 1795. (Living.)
- Holland, Sir Henry, Bart., M.D., Physician to the Queen. Born, 1788. (Living.)
- Hastings, Sir Charles, Knt., M.D. Born, 1794. (Living.)
- Halford, Sir Henry, Bart., M.D., Physician to George III., George IV., William IV., and Queen Victoria. Born, 1766; died, 1844. President of the College of Physicians of London.
- Halliday, Sir Andrew, Knt., M.D., Domestic Physician to William IV. when Duke of Clarence. Died, 1840.
- Hammick, Sir Stephen Love, Bart., Examiner in Surgery to the University of London. Born, 1777. (Living.)
- Hinton, Sir John, Knt., Physician in Ordinary to Charles II.
- Hamett, Sir J., Knt.
- Heward, Sir Simon, Knt. (Dead.)
- Hill, Sir John, Knt., M.D. Born, 1716; died, 1775.
- Harwood, Sir Busick, Knt., M.D., Professor of Anatomy, Cantab. Died, 1814.
- Herbert, Sir Charles Lyon, Knt., M.D. (Living.)
- Hawkins, Sir Caesar, Bart., Sergeant-Surgeon to George III. Died, 1786.
- Hayes, Sir John Macnamara, Bart., M.D., Physician to the Forces during the first American war. Born, 1750; died 1809.
- Hulse, Sir Edward, Bart., M.D., Physician to George II. Born, 1705; died, 1759.
- Hunter, Sir Richard, Knt., M.D. Died, 1848.
- Jocelyn, Sir Conyers, Bart., M.D. Died, 1770.
- Jodrell, Sir Paul, Knt., M.D. Died, 1803.
- Jebb, Sir Richard, Bart., M.D., Physician in Ordinary to George III. Born, 1729; died, 1787.
- Kane, Sir Robert, Knt., M.D. Born, 1810; President of Queen's University in Ireland. (Living.)
- Knighton, Sir William, Bart., M.D., Physician and Private Secretary to George IV. Died, 1836.
- Knight, Sir Arnold James, Knt., M.D. Born, 1789. (Living.)
- King, Sir Edmund, Knt., M.D., Physician to Charles II. Died, 1709.
- Kemeys, Sir Robert A., Knt., M.D. (Dead.)
- Laffan, Sir Joseph Decourcy, Bart., M.D., Physician in Ordinary to the late Duke of Kent. Born, 1786. (Dead.)
- Liddell, Sir John, Knt., M.D., Director General of the Navy Medical Department. Born, 1794. (Living.)
- Lefevre, Sir George, Knt., M.D. Died, 1846.
- Lister, Sir Martin, Knt., M.D., second Physician in Ordinary to Queen Anne. Born, 1638; died 1712.
- Lister, Sir Matthew, Knt., M.D., Physician to Q. Anne of Denmark, and Charles I., President of the College of Physicians. Born, 1565; died, 1657.
- Locock, Sir Charles, Bart., M.D., first Physician Accoucheur to the Queen. (Living.)
- Login, Sir John Spencer, Knt., M.D. Born, 1809. (Living.)
- McGrigor, Sir James, Bart., M.D., Physician Extraordinary to the Queen, formerly Director General of the Army Medical Department. Born, 1771. (Living.)
- Magrath, Sir George, Knt., M.D., for some time Nelson's Flag Medical Officer. (Living.)
- Murray, Sir James, Knt., M.D., Inspector of Anatomy for Ireland. Born, 1788. (Living.)
- Marsh, Sir Henry, Bart., M.D., Physician in Ordinary to the Queen in Ireland. (Living.)
- Maginniss, Sir John, Knt., M.D. Died, 1830.
- Morison, Sir Alexander, Knt., M.D. Born, 1779. (Living.)
- Morgan, Sir Thomas Charles, Knt., M.D. Died, 1843.
- Manningham, Sir Richard, Knt., M.D.
- Mayerne, Sir Theodore, Knt., M.D., Court Physician to James I. and Charles I. Born, 1573; died, 1655.
- Millman, Sir Francis, Bart., M.D., Physician to George III.; President of the College of Physicians. Born, 1746; died, 1821.
- Micklethwait, Sir John, Knt., M.D., President of the College of Physicians, London. Born, 1613; died, 1683.
- Millington, Sir Thomas, Knt. M.D., Physician to Queen Anne; President of the College of Physicians. Born, 1628; died 1703.
- Maclean, Sir L. Knt., M.D.
- M'Gregor, Sir Patrick, Surgeon to the Royal Military Asylum, Chelsea. (Dead.)
- Moncrieff, Sir John, Bart., an eminent Physician. Died about 1710.
- Molyneux, Sir Thomas, Bart. Born, 1661; died 1733; was Physician General to the Army in Ireland.
- Northcote, Sir Henry, Bart., M.D. Born, 1655; died, 1729-30.
- Newbigging, Sir William, Knt., Surgeon. Died, 1852.
- Nicholson, Sir Charles, Knt., M.D., Speaker of the Legislative Council of New South Wales. Born, 1808. (Living.)
- Outram, Sir Benjamin Fonseca, Knt., M.D., Inspector of Hospitals and Fleets. Died, 1856.
- O'Shaughnessy, Sir William Brooke, Knt., M.D., Superintendent General of Telegraphs in India. Born, 1809. (Living.)
- Ould, Sir Fielding, Knt., M.D.
- Olliffe, Sir Joseph Francis, Knt., M.D., Physician to the British Embassy at Paris. (Living.)
- Pepys, Sir Lucas, Bart., M.D., Physician in Ordinary to Geo. III., President of the College of Physicians, and Physician to Middlesex Hospital. Born, 1742; died, 1830.
- Pym, Sir William, Knt., M.D., Superintendent General of Quarantine in the United Kingdom. Born, 1776. (Living.)
- Pringle, Sir John, Bart., M.D., Physician Extraordinary to George III., and Physician in Ordinary to the Queen of the same. Born, 1707; died, 1782.
- Pitcairn, Sir James, Knt., M.D., Inspector General of Military Hospitals. Born, 1776. (Living.)
- Pearson, Sir William Hyde, Knt., M.D. Died, 1849.
- Russell, Sir William, Bart., M.D. Born, 1773; died, 1839.

Petty, Sir William, Knt., M.D., Secretary to Henry Cromwell, etc. Born, 1623; died, 1687.
 Paddy, Sir William, Knt., M.D., President of the College of Physicians. Died, 1634.
 Prujean, Sir Francis, Knt., M.D., President of the College of Physicians. Died, 1666.
 Pennington, Sir Isaac, Knt., M.D., Regius Professor of Physic at Cambridge. (Dead.)
 Richardson, Sir John, Knt., M.D., Inspector of Hospitals. Born, 1787. (Living.)
 Reid, Sir William, Knt., a Quack Doctor knighted by Queen Anne. Died, 1715.
 Sevestre, Sir Thomas, Knt., Surgeon, R.N. Died, 1841.
 Scudamore, Sir Charles, Knt., M.D. Died, 1849.
 Smith, Sir Francis William, Knt., M.D., one of the Physicians in Ordinary to the Lord-Lieutenant of Ireland. (Living.)
 South, Sir James, Knt. (Living.)
 Stonhouse, Sir James, Bart., M.D. Born, 1716; died, 1795.
 Sinclair, Sir J. (Dead.)
 Smith, Sir James Edward, Knt., M.D., Founder of the Linnean Society, and First President. Born, 1759; died, 1828.
 Sloane, Sir Hans, Bart., M.D., Physician to George I. and George II., President of the College of Physicians. The first medical baronet. Born, 1660; died, 1752.
 Sibbald, Sir Robert, Knt., M.D., Physician and Geographer to King Charles II. Born about 1643; died, 1712.
 Staunton, Sir George Leonard, Bart., M.D., afterwards became an eminent lawyer. Born, 1737; died, 1810.
 Scarborough, Sir Charles, Knt., M.D., Physician to Charles II. Born about 1616; died, 1693.
 Stevenson, Sir Archibald, Knt., M.D. (Dead.)
 Shore, Sir John, Knt., M.D. Died, 1680.
 Tierney, Sir Matthew John, Bart., M.D., Physician to George IV. and William IV. Born, 1776; died, 1845.
 Thomson, Sir James, Knt., Inspector-General of Hospitals. Died, 1853.
 Tuthill, Sir George Lemane, Knt., M.D. Died, 1835.
 Watson, Sir William, Knt., M.D., Physician to the Foundling Hospital. Died, 1787.
 Wylie, Sir James, Bart., M.D., formerly first Physician to the Emperor of Russia. Died, 1854.
 Webb, Sir John, Knt., M.D. Died, 1852.
 Wilmot, Sir Edward, Bart., M.D., Physician in Ordinary to George II. and George III. Born, 1693; died, 1793.
 Wintringham, Sir Clifton, Bart., M.D., Physician to George III.
 Witherley, Sir Thomas, Knt., M.D., President of the College of Physicians. Died, 1693-4.
 West, Sir Augustus, Knt., M.D., was Physician in Ordinary to the King of Portugal; Deputy Inspector-General of Army Hospitals. (Living.)
 Whymper, Sir William, Knt., M.D. Died, 1850.
 Willson, Sir Alexander, Knt., M.D. (Dead.)
 Wrench, Sir Benjamin, Knt., M.D. Born, 1663; died, 1747.
 Wakeman, Sir George, Knt., Physician to Queen Catherine, wife of Charles II.

ANSWERS.

No. 204.—LEONINE ACCOUCHEMENTS.

The author of this query will find a note of a similar superstition, with its philosophical explanation, in Reid's "Inquiry into the Human Mind," chap. ii. sec. 9.

"So ardently do we desire to find everything that happens within our observation connected with something else, as its cause or occasion, that we are apt to fancy connexions on the slightest grounds; and this weakness is most remarkable in the ignorant, who know least of the real connexions established in nature. A man meets with an unlucky accident on a certain day of the year, and knowing no other cause of his misfortune, he is apt to conceive something unlucky in that day of the calendar; and if he finds the same connexion hold a second time, is strongly confirmed in his superstition. I remember, many years ago, a white ox was brought into this country, of so enormous a size, that people came many miles to see him. There happened, some months after, an uncommon fatality among women in childbearing. Two such uncommon events following one another gave a suspicion of their connexion, and occasioned a common opinion among the country people that the white ox was the cause of this fatality.

However silly and ridiculous this opinion was, it sprung from the same root in human nature on which all philosophy grows—namely, an eager desire to find out connexions in things, and a natural, original, and unaccountable propensity to believe that the connexions we have observed in times past will continue in time to come." I am, &c.

Park-street, Grosvenor-square. JAMES MORRIS, M.D.

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Medical Times & Gazette.

SATURDAY, JUNE 6.

SCOTTISH LUNATIC ASYLUMS.

If the British public were to be startled at their breakfast-tables by the news from a *Times* correspondent that a tribe of naked savages in Borrioboola Gha had confined half-a-dozen British seamen in loathsome dungeons, manacled, half-starved, and otherwise cruelly treated them by order of one of the mighty potentates who receive the captains of our cruisers on state occasions in the imposing full-dress of a cocked hat and a pair of spurs, or a shirt-collar and top-boots, half-a-dozen indignation meetings would be organized before dinner-time, and in the course of a week Christian gentlemen at Exeter Hall would be expatiating before philanthropic noblemen, sympathizing women, and excited John Bull, on the barbarities of uncivilized life, the humanizing effects of our religion, and the necessity for the immediate establishment of another great mission of evangelization. Deputations from the provinces would wait on the Foreign Minister; the Admiralty would be urged to send an imposing force to the nearest part of the dominions of the offending King of the Cannibal Islands; and it is quite certain that our friends north of the Tweed would not make the shortest speeches, nor declaim with the fewest rhetorical flourishes, amid religious and humane denunciations, on the atrocities of the uneducated heathen.

In the case we have just put, however, there might be some sceptical or benevolent persons to suggest, like the old lady who heard for the first time of the "Massacre of the Innocents," that the alleged cruelties had been committed such a long way off and such a long time ago that one might venture to entertain the hope that the thing was not true; and a voyage of investigation of some few thousand miles could hardly be undertaken to settle the point. But the story we have now to tell refers to a most atrocious system of cruelty and oppression, of the most culpable neglect and horrible torture, which has been going on for years past within a day's journey of London, known, but not exposed, tacitly permitted if not actively promoted by parsimonious trustees of public funds, and this, in a part of the kingdom which is not slow to arrogate to itself the distinction of being the most enlightened and most religious section of the British empire. The facts cannot be

disputed. Scotland is the scene; the time, the present; the authority, a royal commission.

From the "Report of the Scottish Lunacy Commission," then, we cull a few instances of modern barbarity, more horrible and heartrending than any of the apocryphal romances of travellers in the tropics. Here is a general picture of the wretchedness of Scottish pauper lunatics not in Asylums, in the words of the Commissioners:—

"A large number are detained at home or illegally placed in the houses of strangers. The generality of these are in a most destitute condition, being badly lodged, ill fed, scantily clothed, and not provided with sufficient bedding. A few are subjected to personal chastisement, some are permanently chained, others are placed in outhouses, or are locked up in small closets just capable of holding them. Many are filthy in their persons, infested with vermin, covered by mere rags, or allowed to remain perfectly naked. Some are without bedding, except loose straw or heather cast on rough boards, and their rooms emit an intolerable stench. Others, again, are homeless, and are allowed to wander at large."

Next, we may take an account of the condition of the lunatics in a licensed house at Musselburgh, into which a number of lunatics were removed from an excellent Asylum at Perth, simply to save money. The Commissioners say that these poor lunatics were—

"placed in a small house, standing in a low and confined situation, provided with little or no means of exercise, and, from its size, altogether incapable of properly accommodating them or affording them a fair chance of recovery. They were crowded together day and night in small rooms, imperfectly warmed and ventilated, and almost entirely without seats or tables, and wanting the ordinary conveniences of life. Their clothing and bedding were insufficient; and we have great reason to fear that they were stinted in food. Sickness, with a consequent high rate of mortality, ensued; and during illness, and after death, little or no regard seems to have been paid to the feelings of their relatives or friends."

Passing from general to particular instances, we may quote one terrible example in—

"the case of a woman who was brought from Orkney to the Edinburgh Asylum in March, 1856, in charge of a sheriff's officer, and who on her arrival was found to be in a state of great exhaustion, having about six ribs broken on each side of the sternum. According to the patient's declaration to the Procurator-Fiscal of Edinburgh, the injuries were caused by the attendant in the gaol at Kirkwall putting his foot on her breast, to enable him to secure her with straps or ropes."

Here is another. The woman is still alive in the Perth Asylum. She had been "troublesome with her tongue," and was brought to Perth "having a piece of stick put inside her mouth crossways, and tied behind her head. The authorities did not know how long the stick had been kept there, but when she was taken into the Asylum it was found that her tongue, from the long-continued pressure, had mortified, and sloughed away."

That these are not mere extraordinary exceptions to a general system of good order and kindness appears from the statement of the Commissioners, that the Scottish lunatics "are often harshly treated, and during the journey to the Asylums are frequently painfully manacled, or secured with ropes, sometimes bound so tightly as to penetrate the flesh; and cruelties of this kind appear to pass unnoticed and unpunished."

Among other cases is one of a pauper, at Lock Carron, who had been chained in a den unfit for a dog—chained, and had been always chained for *thirty years*—the chain being an iron chain two feet and a half long; and with the exception of once being carried 200 yards he had not been in the open air since he was confined. What can equal in horror the following description of one of two insane sisters? She was

"confined in a strong wooden cage in the corner of the room, in a state of complete nudity, and hardly a vestige of

anything to cover her—nothing whatever in the shape of bed clothing to be seen. An old wooden bedstead was in this cage, similar to those used in our strong rooms, but there was nothing but the boards. She was in a most filthy, dirty state, and quite furious, using awful oaths. It is thirteen years since she became insane, and for the last nine years has been quite furious, and appears to be exceedingly dangerous, as she tears every article of clothing to pieces the moment it is given her, and if she had any opportunity of doing an injury to either her father or mother she would do it."

But we need not continue this sickening recital. The Report is printed and open to all who wish to read. The House of Commons and the English people hear of these things now for the first time; but they were not unknown in Scotland. Sir George Grey said in the House of Commons last week:—

"The late Lord Rutherford, when Lord Advocate, brought in a Bill that, if passed, would I believe have remedied all the evils now complained of. That Bill was read a second time with the warm approbation of many Scotch members on both sides of the House, and was by common consent referred to a Select Committee; but the opposition raised to it in Scotland on the miserable ground of the expense it would incur (hear, hear) proved fatal to the measure, and the Lord Advocate found himself unable to carry it."

This Bill was brought forward in 1848, so that for nine years this disgraceful state of things, well stigmatized by the Lord Advocate as "a disgrace and a scandal to Scotland," has been permitted to continue; and it is to the visit of an American lady in 1855, and her representations to the Government, that we owe the Royal Commission, whose Report has at length aroused a general cry of indignant astonishment throughout the country.

It is not our business to inquire "Whom shall we hang?" for all this. The Sheriffs, the Magistrates, the Board of Supervision, are all on their defence, and we must wait for their defence before condemning them. If they have culpably allowed the laws they are entrusted to enforce to be disregarded; if, as the Report appears to prove, they have scandalously failed in their duty, no punishment that can be inflicted will be sufficiently severe. In the mean time, we trust that all classes will exert themselves earnestly in concert with Government and Parliament to adopt necessary measures for the relief of Scottish lunatics.

But in condemning the system of maltreating these poor people, we must not fall into the common error of looking upon all Scottish Lunatic Asylums as equally bad. Neither in Parliament nor by the general press has sufficient distinction been made between the public chartered institutions, which are generally speaking managed most admirably by a superior class of medical practitioners, and the private homes and unlicensed receptacles belonging to the greedy unqualified traders in lunacy who have brought such disgrace on their country. On looking into Dr. Webster's most interesting "Notes of a Visit to the Public Lunatic Asylums of Scotland," published in the *Psychological Journal* last year, the reader cannot fail to be struck by his account of the almost perfect condition of some of these Asylums. The attention paid to the intellectual culture and recreation of the inmates in the Perth Asylum, by concerts, tours, and games; the amusements, excursions, and dancing parties at Dundee; the lectures and concerts at Montrose; and the important feature characterising Aberdeen, of leaving all entrances into airing grounds constantly open, and thus removing the prison-like appearance so common elsewhere; with the permission of pupils to attend the Medical practice and the lectures of the Physicians, are all points which might be imitated with the greatest advantage in many of our English and Irish Asylums, and are as creditable to those engaged in the man-

agement of the Scotch Public Lunatic Asylums as the faults of the private mad houses are disgraceful.

Then as to the question, What steps are to be taken to prevent a continuance of these abuses, and to protect the poor lunatic? the reply is simple. Amend the law, and see that the amended laws are properly obeyed. The lunacy laws of Scotland should be assimilated with those of England, and a competent Board or Commission should be appointed, and invested with due authority to superintend the insane in Scotland, to license houses for the reception of the insane, to visit all asylums, licensed houses, poor-houses, and houses containing single patients. The general want of Medical superintendence in the Asylums, or rather the absence or deficiency of Medical authority in comparison with lay influence, is notorious; and we insist that the whole of the superintendence of the insane, both in England and Scotland, should include much more of the Medical element than is now the case. Why the majority of Commissioners in Lunacy should be lawyers or politicians we never could comprehend, except on the ground that the Medical Profession has no representatives, or hardly any, in either House of Parliament, and as long as this is the case we must expect to see every office of honour and emolument bestowed upon those who, whatever may be their want of qualifications in other respects, happen to possess sufficient influence with the Ministers of the day, but whose incompetence and carelessness are sure before very long to bring disgrace on the government and the country.

THE SALE OF POISONS BILL.

SINCE our last number, the SALE OF POISONS BILL has advanced a stage in the House of Lords, having passed a second reading with the understanding that the whole discussion shall be taken upon going into committee.

It may be convenient, therefore, at the present time to consider how far this measure is liable to affect Medical Practitioners as well as the respectable class of druggists, and whether it is likely to prevent or check accidental, suicidal, and criminal poisoning. The framers of the Bill have wisely avoided giving any definition of a poison, but in one of the schedules twenty-three articles are enumerated which are described as poisons, and are taken to be such for the purposes of the act. We subjoin a list of these articles:—

1. Sulphuric, nitric, and muriatic acids. 2. Arsenic and its compounds. 3. Corrosive sublimate and its compounds.
4. The poisonous vegetable alkaloids. 5. Prussic acid.
6. Cyanides of potassium, mercury, and silver. 7. Chlorides of zinc and antimony. 8. Essential oil of bitter almonds, and every mixture containing it. 9. Cantharides and its preparations.
10. Belladonna and its preparations. 11. Hemlock and its preparations. 12. Aconite and its preparations.
13. Opium in tincture, extract, and powder. 14. Foxglove and its preparations. 15. Stramonium and its preparations.
16. Chloroform and its compounds. 17. Oxalic acid and the salt of sorrel. 18. Nux vomica, seeds and bark. 19. Tartarized antimony and its solution. 20. Cocculus Indicus. 21. Ergot of rye. 22. Savin. 23. Lobelia.

Among these substances, there are some which are not used in medicine, others which are sparingly used, and others again which, in some form or other, are frequently employed. By a second schedule, the most important pharmacopœial preparations of the last-mentioned class are, with one or two important exceptions, exempted from the operation of the measure; and to avoid evasions of the Act on the one hand, and injustice to lawful Medical practice on the other, it is provided by Section IV., that either schedule shall be subject to revision and alteration by the Privy Council.

The sale of any of the above-mentioned substances can henceforth only be made to a person of full age, in the presence

of a witness of full age, known to the purchaser as well as vendor. It is also required that a certificate should be produced, signed by a clergyman, Medical practitioner, or justice of the peace, who knows the applicant, and can state that the poison may be safely supplied to him for purposes of trade or lawful use. The vendor is required to make entries of date of sale, name of purchaser, his place of abode, name and quantity of poison sold, purpose for which required, and the name of the person giving the certificate. Poisons, if solid, are to be sold in secure wrappers, or if liquid, in bottles of a quadrangular shape, labelled POISON, with the name and address of the vendor, and to avoid the effect of removal or loss of label, the word POISON is required to be moulded in raised letters on the sides of the bottle. Solid colourless poisons are to be coloured with indigo or soot, and liquid colourless poisons are to be coloured with archil.

Such is a general statement of the restrictions proposed to be adopted as a substitute for the present indiscriminate sale of poisons. It has been already objected to this measure, that it errs in being too stringent for the convenience of the public; and a daily contemporary has put the following case:—“Under the new act, a person who may be taken ill in the street, and who, therefore, steps to the nearest *apothecary's shop* for a dose of the medicine which he may be in the habit of taking on such occasions—let us suppose *laudanum*—he will be met with a flat refusal.” Another writer places the supposed hardship to the public in a still more prominent form. Thus he says:—

“Some of the more virulent poisons, doubtless, ought never to be sold except in prescriptions, or by order of a medical attendant known to the chemist; but the case is somewhat different with *laudanum*. It is well known that in this changeable, humid climate, the human constitution is subject to a great many pains. It would be a great hardship to have such restrictions placed upon the sale of drugs that the sufferer could never avail himself of an anodyne. For example, a person is travelling—no uncommon thing in the present day—and in a strange place is seized with severe pain. Thirty drops of laudanum have been his accustomed means of relief. But no! he cannot have it without sending for a *Medical man*, lest he should intend to poison himself. If a man be so resolved to die, he will find other modes of committing suicide.

“Or a minister, public speaker (or it may be an M.P.), is going some distance to preach, lecture, or speak (even from the hustings); and through inclemency of the weather, or excitement, or both these causes, he is seized with severe pain, which he knows a small opiate would relieve, and enable him to fulfil his engagement; but he cannot have it, and the congregation or assembly must be kept waiting till a Medical man is sent for.

“Suppose another case. The head of a family is ill; the village doctor is out for the day, or the sufferer cannot afford to have a doctor, so he sends his son or daughter, eighteen years of age, for a sedative draught; but it cannot be sold, or even given! Why not? There is no order from a clergyman, etc., the messenger is not of age, and he is not accompanied by some person who knows both him and the *druggist*. Not one of the requirements of the proposed Act can be complied with, and the patient may suffer or die for want of help, which is at hand, but must not be given.”

The eleventh section of the act provides for these supposed grievances by entirely exempting from its operation the sale of any medicine required to be made up or compounded according to the prescription of a legally-qualified Medical Practitioner, or *made up or compounded by a legally-qualified Medical Practitioner, etc.* With a due regard to the public safety we do not see how greater licence can be reasonably given. If it is to be suggested that any person calling himself a “chemist and druggist,” who may have been, a week before, an oilman, a grocer, or a horse-jockey, is to have the same power of prescribing and selling *laudanum* to any person as one who has gone through a regular Medical edu-

eation and examination, such a suggestion simply strikes at the root of any restriction whatever, and leaves the public at the mercy of the ignorant general shopkeepers throughout England and Wales. At page 543 of our last number the reader will find a description of the practical results of this suggestion. A Mrs. Whitehead is about to be tried at York on a charge of manslaughter, for selling laudanum in place of Godfrey's Cordial, in such quantity as to cause death. There is another case, probably the case to which the author of the above-quoted remarks adverts in his last paragraph.

"The head of a family is ill; the village doctor is out for the day; or the sufferer cannot afford to have a doctor, so he sends his son or daughter, 18 years of age, for a sedative draught; but it cannot be sold, or even given!" Why not? Here is the dreadful and intolerable hardship of this Act of Parliament. At present, however, the hardship does not exist: the laudanum can be sold even to children 7 years of age. As we have elsewhere (a) recorded, James Lilley, a butcher, "the head of a family," sent out a boy for "three-pennyworth of laudanum," procured it without difficulty, took it,—and died! In a third case, a child named Charles Houseman was also poisoned by laudanum. The report says, "The man who sold the poison was a *grocer*, who keeps it for the accommodation of the public, but does not even label the bottles." And this is the system which writers of the above stamp would wish us to maintain! How many heads and members of families are annually taken out of the world by this kind of free trade in "laudanum," and by allowing every ignorant village shopkeeper calling himself chemist and druggist to prescribe and sell, even to children, without the slightest restriction, this dangerous article!

It is almost within every person's experience that he has either known or heard of some unfortunate individual who has been poisoned by laudanum sold in mistake, or through the most blundering ignorance for some other drug. The deaths from the preparations of opium cannot be computed at less than two hundred per annum in this country, not to mention the numerous cases of poisoning by this drug in which the individuals recover after having had a narrow escape of their lives. Is it just or reasonable to maintain and defend such a system as this? Ought we to allow two hundred, one hundred, or even fifty lives, to be sacrificed annually to the grossest ignorance, in order that a sufferer on an emergency may procure his anodyne at the nearest druggist's? or that a public speaker, it may be an M.P. (an *argumentum ad hominem*), seized with severe pain, may find relief in a small opiate? or, that the head of a family, who cannot wait for, look after, or afford a doctor, may send his son or daughter to procure his sedative from a village shop, drink it,—and die? What is this objection but a mere demand that the victims of mistake are not already sufficiently numerous, and that without precaution or prevention the public should either be permitted to poison themselves, or be poisoned by that motley class who, in the present state of the law, are allowed the unrestricted privilege of prescribing and vending drugs of the potent properties of which they know nothing?

The argument of writers of this class, however, if admitted at all, will go much further than they probably intend. If admitted as to laudanum, it would exempt all other poisons used as medicinal agents from the operation of any restrictive act. One man may require as his favourite tonic, arsenic or strychnia; another may require prussic acid to allay nausea and vomiting, while a third will insist upon having his favourite solution of atropia or aconitina for allaying pain! Why is he to be debarred from the use of his favourite medicine—why should he be compelled to procure a certificate or witness, or

why should he be called upon to have a doctor if he cannot afford it or does not wish it? The answer is sufficiently plain, except to those who are determined to listen to no plan for restricting the sale of poisons. Any person having lawful necessity for such powerful poisons as those above mentioned for medicinal use, can have no difficulty in procuring a Medical prescription or certificate sanctioning such use. In the absence of this prescription any one, as we daily learn, incurs an enormous risk of life; and when armed with it, the Poison Restriction Act cannot in any way affect him or the druggist who dispenses it.

Surely the convenience of a few who have either not the inclination or the foresight to provide themselves by Medical prescription with a noxious drug which they know they may require, is not to be studied in preference to the general security of the lives of the public. Men who argue in this fashion against a restriction of sale of poisons bill, should speak plainly at once, and announce their opinion that it is better that one or two hundred persons should die yearly through accident, suicide or murder from laudanum, than that an M.P. or the head of a family should be deprived even for an hour of his favourite sedative!

We purpose to consider at another time the mode in which some of the clauses will affect Medical practitioners and the respectable class of druggists.

THE WEEK.

WE have received from Mr. James Shaw of Cheetham, Manchester, the particulars of another instance of symptoms of poisoning which manifested themselves in a child of one year and eight months old, after eating locust *beans*. The symptoms were increasing feebleness and depression, the child being previously in good health and spirits. During four days these symptoms continued, and on the second day after the symptoms commenced, *five* of the beans were passed by the rectum, and on the fourth day *three* more. On the fifth day the surface of the body and limbs was pale, the eyes sunk, the features and limbs shrunken, as if from complete exhaustion by diarrhoea. There was no purging, however, but the abdomen was distended and tympanitic. The mucous membrane of the mouth was pale, the tongue was covered with a whitish brown fur, smooth and slimy. Nausea and attempts to vomit resulted when the child was put in a sitting posture. The wrists were almost pulseless; and the heart's action was very feeble. Perfect consciousness remained, and the common sensibility of the cutaneous surface did not seem to be injured. The voice was reduced to a whisper, and the efforts to cry exceedingly feeble, suddenly ceasing with a slight sigh, as if from exhaustion. She could not move in the slightest degree the fingers, hands, arms, or legs, nor could she support her head upright upon her shoulders. Tickling the soles of the feet seemed to produce much distress, manifest by the efforts to give expression to a strong cry. After minute examination, the case appeared to present a complete paralysis of all the voluntary muscles; and an exhausted state of the irritability of the involuntary, inducing especially a feeble circulation and respiration, loss of voice, paleness of the surface, shrunken appearance of the features, general prostration and tendency to syncope when moved from the horizontal position, when the heart's action became more embarrassed. The recumbent posture being maintained, and the temperature of the body attended to, with thin arrow-root and milk for drink, the circulation rallied a little on the 6th day. There appeared to be muscular pain at this time, as the child cried when its arms were laid hold of. On the seventh day the circulation was more evidently restored. The bowels were daily evacuated, the motions having a slimy look and a bilious tinge. On the thirteenth day she could move the fingers of

(a) See Medical Times and Gazette, May 30, 1857, p. 543.

the right hand a little, but no other part, and on the eighteenth day her state is thus described:—"She will not now lie so much, but prefers to be supported in a sitting posture; and she can support the head upright for some time, but it drops if long continued. She can stir her legs but cannot draw them up, and if a bright toy is placed within her reach she can clumsily retain it, but cannot move her arms at all." About the thirteenth day she succeeded, for the first time, by leaning her head forwards and downwards, in raising her right hand to the extent of reaching her mouth in this attitude. The last report of her is about the thirty-eighth day, when she is said not to be able to move her legs either to stand or walk; and but feebly in any way. She eats well and sleeps well, and the use of her limbs is gradually being recovered as time progresses. "I prefer," says Mr. Shaw, "trusting to time, and keeping her in good health, to any additional treatment; and judging from the progress already made, recovery seems certain, though slow." In none of the previous cases of reported death after eating "locust beans and pods," have we had any account of the symptoms, and this case is valuable for the excellent account given us of the pathological state, as far as it could be judged of from the symptoms. We still think these pods and beans would repay a careful analysis on a large scale, with the view of ascertaining if any alkaloid, or other principle of a poisonous nature, does not exist in them, or may not be developed from them, under the influence of the gastric juice or pepsic acid.

The Assistant-Commissioner of the Metropolitan Police has just issued a Report upon the operation of the Common Lodging-houses' Act, and by this document it appears that much good has already resulted from these measures, in improving the sanitary condition of the poor in various parts of the metropolis. The Act in question came into operation in the year 1851, before which period many of the lodging-houses frequented by the lower classes of society were the fruitful sources of disease, misery, and crime; but, under the operation of the new laws, many of the evils have been abated or removed; the houses are now much improved, the keepers are of a better class, and the accommodation provided is of a higher standard, although the payment has not been increased. The Report gives in detail the condition of several houses in St. Giles's, in Ratcliff, in Shadwell, in Whitechapel, and in other localities, where filth and overcrowding were found to exist in a most marked degree; but in which cases, under the provisions secured by the Act, the nuisances were removed, and the houses converted into a normal state as regards cleanliness and number of inmates. We are glad to find that in enforcing the new enactments, the officers engaged in the duty have acted in all cases with consideration and forbearance, so that although, during a period exceeding five years, nearly 800,000 visits have been paid, both by day and night, to the worst districts, not a single case of assault has ever taken place on any of the officers, and no just complaints have ever been made of intrusion into a private dwelling. The machinery by which the Act is carried into effect is by a system of registration, an inspecting officer being empowered to require the owner of any house known to be used as a common lodging-house to register himself, and if, at the expiration of a certain time, the house is not put into a proper state, the registration is refused. The accommodation given in registered houses consists of clean beds and bedding, well-ventilated and lime-washed sleeping rooms, well-cleaned pitchers, plenty of water for all purposes, and good water-closets and sinks, drained and trapped to the common sewer. The improper mixing of the sexes is carefully avoided. The diffusion of contagious disease is prevented, as far as possible, by the provision in the Act which requires the keeper of each house to give informa-

tion of any case of illness to the nearest police station, from which notice is sent to the parochial Medical officer, who, in visiting the case, orders its removal to the workhouse or the hospital, and the room from which the patient has been taken is fumigated and closed during three or five days, and cleansed and lime-washed before lodgers are readmitted. The Report contains an appendix, giving the testimony of various metropolitan Medical officers of health and parochial medical officers to the improvements already effected by the operation of these Acts, in diminishing disease, and in improving the moral condition of the poor; and a general feeling is expressed in favour of extending the measures now in force, so as to comprehend many other dwellings which are, at present, expressly excluded from the provisions of the Act, or which, by legal quibbles, are allowed to escape from its penalties. As an illustration coming within the latter category, we may mention that an overcrowded brothel was proceeded against, but the magistrate ruled that the information must be dismissed because a brothel was not a lodging-house!

The Medical Lecturers in Edinburgh have circulated a statement in regard to Medical reform, in which the following remarks occur upon the necessity we have always insisted upon, namely, the taking from educating bodies the right of licensing. "The examiners of the University of Edinburgh are not, as in many other Universities, appointed by a system of election from a large body of graduates and other competent persons; neither are they subject to dismissal, even in case of proved incompetency; the rule is, that each professor examines upon the subject which he teaches; and that his decisions are, upon that subject, practically uncontrolled. The consequence is, that the degree of M.D. in the University of Edinburgh, is either a certificate of approval given by teachers to their own pupils, or it is a verdict passed by a body of teachers upon the pupils of competing teachers, or of a rival institution." The Lecturers add, "A power so liable to abuse, and so arbitrary, is an anomaly too dangerous and too indefensible to remain much longer without challenge from those to whose disadvantage it operates. That a remonstrance on the subject should come from Edinburgh cannot be surprising, for it is in Edinburgh alone that a body of teachers, unchartered and unprivileged, have been able to maintain a complete and efficient school of Medical science and practice side by side with a University arming its professors with a monopoly of the examining power." Of course this will not pass without a reply.

The Festival of the Royal Medical Benevolent College was celebrated on Thursday in last week, and was very numerously attended. The subscriptions amounted to upwards of £3000, and a most satisfactory account was given of the progress and prospects of the College. It was a subject of general regret that at this Festival, as well as at the meeting which took place on the same day in the same building, so few of the representatives of the Halls and Colleges and Universities connected with our Profession were present; and this circumstance must, we fear, be calculated to inspire the body of the Profession with the belief that those who superintend Medical politics and education are too little sensible of the duty of protecting the social rights or of promoting the benevolent objects of the great majority. While congratulating the founders of the Royal Medical Benevolent College upon the good which they have already accomplished, we feel that much more remains yet to be done. The appeals continually sent forth to the Governors of this Institution on behalf of candidates for pensionerships or scholarships reveal an amount of misery and privation on the part of members of our Profession, or their widows and children, which it is

fearful to contemplate; and we hope that as years pass on and the objects of the College are better known, the sphere of its operations will be progressively enlarged, so as to embrace a much greater number of deserving objects than can at present be relieved by the existing resources of the establishment.

An inquest was lately held upon the body of a young woman who died under very suspicious circumstances, after being taken out of the Regent's Canal in the New North-road, Hoxton. It appears that the girl was seen struggling in the water, but was removed from her perilous position while yet alive; and after several attempts at restoration on the part of a Medical gentleman who was called in, she so far recovered as to give her name and address, and appeared to be in course of complete recovery. But in little more than half an hour she rapidly sunk and died; and it was then ascertained that the girl had experienced some very harsh treatment from her mother. A post-mortem examination of the body was made, and on inspecting the brain, that organ was found gorged with blood and serum, especially at the base; and on the surface of the cranium a bruised appearance was observed, such as might have been caused from severe injuries inflicted by some obtuse instrument during life. In the evidence adduced at the inquest, it was shown that the deceased had been beaten by her mother very severely with a riding-whip, and also with a thick piece of wood. The verdict returned was that death was caused by congestion of the brain, occasioned by the blows inflicted, the immersion in the canal, and subsequent mental excitement. Although we do not believe that a verdict could have been returned implicating any person as being the direct cause of the death, yet the case presents some important Medico-legal questions for consideration; and the evidence, however suggestive as to a homicidal criminality on the part of the mother, is certainly by no means conclusive either as to the guilt or the innocence of the suspected party. The appearance of bruises on the surface of the scalp was, no doubt, due to the injuries inflicted during life; but the congestion of the brain, and the flow of blood and serum from the base of that organ, may have been due altogether to the suffocation induced by immersion in the water. The coroner's jury were obviously placed in a difficult position in determining the true cause of death; and we are not sure that the difficulty would have been lessened by the removal of the case to a higher tribunal; but the decease of a person soon after immersion in the water is so easily accounted for on the theory of death by suffocation, that it would be obviously impossible to sustain a verdict of manslaughter against a suspected person, even although some degree of violence was proved to have been inflicted before drowning.

At the late competitive examination for Assistant-Surgeons in the Army there was not a sufficient number of candidates to fill the vacancies; consequently an advertisement has been issued for another examination in July, just before the East India Company's examination, when some twenty appointments will be made if competent candidates appear. The inducements to enter the East India Company's Service are so much greater than those offered in the Army, and there is so much dissatisfaction at certain defects in the rates of pay, rank, and retirement in the latter service, that there is not likely to be a superabundance of candidates. It is to be hoped that the Commission now sitting on the Army Medical Department will duly weigh these facts, remove all cause of reasonable complaint, and thus make the Service so popular that the *élite* of the Medical Schools will come forward for Army Medical appointments.

It is proposed to send a petition from the Hospital Medical Staff of London to the authorities of the University of Oxford in favour of a scheme now under consideration, the object of which is to connect the general education of the country with the Universities by granting the degree of "Associate in Arts" to all those who can pass a certain examination. The scheme has evident recommendations to the Medical Profession in general, and to Medical Teachers especially; and we trust that the petition will be signed by all who can be applied to in time. It is only want of time that has prevented the corporate bodies, and the whole Profession, from being invited to join in the petition.

The *British Medical Journal* continues its attacks on the Army Medical Department. The officers of the Middlesex Hospital are not satisfied with the plan of the new hospital at Netley, therefore the medical department of the army is incompetent. We have alluded to this hospital before, and the objections of the Middlesex staff, so that we need only say that on these objections being received, the authorities of the other London hospitals, were invited to send a Medical officer from each to inspect the plans. Some of the most distinguished men in London attended at the Board accordingly, gave their unanimous approval of the plans, and objected to the alterations proposed by the Middlesex staff. The statement of our contemporary, that the sewage is "planned to flow on to the flat expanse of a river mud-bank," is quite incorrect. It is "planned to flow" through tubular drains into the centre of the stream, so that it will be carried every tide out into the Channel beyond the possibility of returning to the bank. The statement that the works have been stopped by order of Government, is equally incorrect. The simple fact is, that some workmen, who were dissatisfied with thirty-three shillings a week wages, struck, and were dismissed, but the works will go on without further interruption. The designation of the site as the "Netley Swamp" is really unjustifiable, and we feel quite sure that if the able editor would visit the spot and inspect the plans himself, he would be the last to admit such a groundless and irrational attack on the Army Medical Department as that which appeared last week in the journal of the British Medical Association. We are accused of "defending any act of the Medical department of the army." But while we trust we shall never be found to defend any improper act of the department, we do look with some satisfaction on the fact, that while our medical contemporaries, without exception, and the *Association Journal* in particular, joined in the outcry raised by the general Press at the outset of the late war against this department, and more particularly against Dr. Smith, we alone took the trouble to ascertain the true facts of the case, and week after week insisted upon that which has since been universally admitted, namely, that the department was blamed for the faults of others, that the Medical officers of the army would have done all that was necessary for the health and well-being of the soldiers had they been permitted, and that almost all the evils which nearly ruined our army would have been prevented had the recommendations of Dr. Smith at the very commencement of the war been attended to.

The second *Conversazione* for the season was held at University College, on Wednesday evening last. The great library of the institution was the spot selected for the assembly, and the tables were covered, and the walls hung with numerous articles of science and art. Among the former were a new quality electrometer, for the purpose of distinguishing the different forms of electricity, in which the motive power was

supplied by alternate plates of manganese and zinc; and a new form of air-pump, under the exhausted receiver of which water was made to freeze by its own evaporation. Among the objects of art were a series of views in Egypt, several excellent paintings, and some exquisite photographs. Most of the Professors were present, and the reunion was attended by a great number of the former and present students of the College, and by a fair sprinkling of the literary and scientific notabilities of the metropolis.

We have just received the Report presented to the President of the Board of Health by Dr. Headlam Greenhow, upon the murrain in cattle. That physician has not only collected a great amount of information upon the literature of the cattle disease, but he has personally visited many of the localities where cattle are kept. Upon the whole, the conclusions drawn are hitherto unsatisfactory, for although the existence of epidemic disease is proved beyond a doubt, yet the causes of its outbreak, its prevention, and cure, are still among the desiderata of science. The disease seems to have been most capricious, for it has been found to rage on some farms, while the adjoining farms have displayed a perfect immunity from the infection: a man who lost almost his whole stock of cows in 1850, has since that period experienced little or no loss from the disease; and it does not appear that the murrain has been more prevalent in London than in the country. Personal inspection also proved, that in many places where cows were kept, the sheds were kept very clean and well ventilated; although in certain cases the drainage was found to be very defective. We are informed in this Report, that veterinary practitioners are rarely consulted in London for the diseases of cattle, the most usual treatment being *to slaughter the animals for food as soon as they manifest unequivocal signs of illness*. But what is still more extraordinary, it appears that although diseased meat is notoriously sold at the markets, and consumed as food by a great portion of the community, it is not productive, so far as present evidence goes, of any deleterious effect upon the human subject. But although this negative evidence may have some value, it must not be forgotten that diseases have been known to arise in former times and in neighbouring countries from the consumption of diseased or putrifying meat; and it is evident that the whole subject requires very careful consideration, and the examination of a number of facts, which time and circumstances may hereafter develop. In the meantime, Dr. Greenhow's careful analysis of the evidence placed within his reach will be perused with great interest and attention.

A number of Medical men assembled at the House of Commons on Thursday, to hear the speeches of Mr. Headlam and Lord Elibon on the Medical Reform Bills, but from the long debates on previous motions the Bills were postponed until next Monday. The general impression, however, appeared to be that Lord Elibon's measure would receive the support of Government, and therefore that Mr. Headlam's Bill would have been thrown out had it come on.

REVIEWS.

A Treatise on Cancer and its Treatment. By J. Weldon Fell, M.D. of the University of New York. London: 1857, 8vo. pp. 95.

THE object of this work, dedicated by Dr. Fell to the "distinguished, liberal, and eminently practical Surgical Staff of

the Middlesex Hospital, as a slight acknowledgment for their uniform kindness and valuable assistance during his connexion with them," is stated to be "to bring before the Medical Profession a new, and what I believe to be an entirely original mode of treating the disease of cancer in all its various forms." After an explanation of the reasons which induced the author to maintain the composition of his remedy secret, (reasons which our readers will very well comprehend and appreciate,) and an account of the terms of agreement between himself and the Surgeons of the Middlesex Hospital,—terms we laid before our readers months ago,—a Report of the Surgical Staff of this Hospital, dated March 18, 1857, is given. The following extract from this Report will be read with interest:—

"The undersigned have great pleasure in now stating that Dr. Fell has fulfilled the obligation contracted by him frankly and without reserve; and whilst they regret that the limited period which has elapsed since the treatment in the hospital was commenced (January 22nd) prevents their coming to any positive conclusion upon certain points of great importance, they have yet no hesitation in stating their unanimous opinion—

"I. That Dr. Fell's mode of treatment is in entire accordance with known principles of surgery, is ingenious, safe, and easy of application by well-instructed surgeons.

"II. That it may be employed in all cases in which surgeons use the knife, and in many others in which no prudent person would recommend a cutting operation.

"III. That Dr. Fell confines himself to the enucleation of the tumours merely; and, in the case of the breast, does not remove the entire gland, as is commonly considered necessary in the excision of mammary cancers in this country.

"IV. That it is a great advantage attending this mode of treatment that the patients are not confined to bed or to the house; but that, on the contrary, they are able to obtain the benefit of exercise in the open air. In some instances their health has manifestly improved during the treatment.

"V. That the patient being exempt from the immediate hazards of a cutting operation, such as exhaustion and hæmorrhage, and being able to pursue the treatment without confinement to bed, they appear little prone to such constitutional affections as erysipelas and pyæmia.

"VI. That the enucleation of the diseased mass is succeeded by a healthy granulating and cicatrizing surface. From the inspection of Dr. Fell's private cases of longer duration than those in the hospital, the undersigned have had opportunities of observing that healthy cicatrices are eventually formed.

"VII. That all the patients have suffered pain during the treatment; some have spoken lightly of their sensations, others have complained much. No one, however, has sustained that acuteness and severity of pain which characterises the action of caustics as ordinarily employed; and it has been observed that the pain which has been felt has usually been referred, not to the tumour itself, but to parts at some distance from it, as, in the case of the mamma, to the shoulder and arm.

"VIII. That, although the treatment is less expeditious than that usually resorted to, yet, taking account of the average time that elapses before a patient has completely recovered from a cutting operation, it is probable that the difference between the two modes of treatment, in point of expedition, is by no means great.

"IX. That the undersigned have not as yet had time to ascertain the average duration of the benefit conferred by the treatment, nor have they any means of knowing whether, in the event of a return of the disease, there be any differ-

ence observable from what is known to take place after excision.

(Signed)

"ALEX. SHAW.
CAMPBELL DE MORGAN.
CHARLES H. MOORE.
MITCHELL HENRY."

"March 18th, 1857."

After this preface our readers will look with very natural interest for an analysis of Dr. Fell's work, and this may be given without any great difficulty. The book consists of 63 pages of text, and 32 pages of selected cases. Of the first 63 pages, seven only are occupied by the author's plan of treatment, the preceding 56 being filled by a most common-place compilation on the varieties of cancer and their treatment. Any first year's student after looking over Walshe, Paget and Druitt, could have written this part of the book; we therefore pass on to the "author's plan," which under the peculiar circumstances of the case we will give in his own words:—

"When my attention was first attracted to the study and treatment of this disease, it naturally occurred to me that before success could be obtained, it would be necessary to find some active agent exerting a specific effect upon cancerous matter, and which would exert the same influence by absorption, destroying the tendency existing in many cases in the constitution for the reproduction of cancerous cells, and which, taken at the same time internally, would destroy the cancerous diathesis. Many remedial agents were tried without producing the desired effect, and all efforts to cure the disease were for a long time unsuccessful, and apparently hopeless, until I heard of a root used by the North American Indians on the shores of Lake Superior, which the Indian traders told me was used by them with success in these affections. It is a perennial plant, known commonly among these Indians by the name of puccoon, but from the red, blood-like juice that exudes from it when cut or bruised, is called by botanists the *Sanguinaria Canadensis*. It grows in great abundance in the wild forests and plains of the far West; indeed, in early spring the ground in many parts is covered by its large white blossoms. Such a plant, with showy snow-white flowers, would naturally soon attract the attention of the savage; but when he found that whenever this plant was injured or a leaf-stalk broken, it exuded a copious stream of a blood-like fluid, he immediately considered it as sacred and a great medicine. And no doubt some poor squaw, suffering from this dreadful disease, was the first who applied it, after having tried all the simple herbarium of the uneducated savage without success, and then, in despair, applied the bruised bloody pulp of the white flowering puccoon. This extraordinary plant, although unknown to civilized man as a remedy for cancer, has been long well known as a powerful emmenagogue and alterative, and, as such, has been admitted into the Pharmacopœia of the United States; and it is a question well worth consideration to ascertain how far its connexion and power over the uterine functions has to do with its influences in destroying the peculiar cancerous diathesis existing in most cases.

"According to Wood and Bache, 'sanguinaria, when applied to a fungous surface in the form of powder, acts as an escharotic. It has been given in typhoid pneumonia, catarrh, pertussis, croup, phthisis pulmonalis, rheumatism, jaundice, hydrothorax, and some other affections, either as an emetic, nauseant, or alterative, and its virtues are highly praised by many judicious practitioners.' (a)

"The first experiments made with the puccoon were upon ulcerative surfaces, and although requiring months of continued application, yet the removal of the tumour was effected, and the patient cured. It was then combined with various substances with a view to hasten its action; but none appeared to do so well as the chloride of zinc, for with this compound large ulcerated tumours were removed in a few weeks with comparatively little, and in many cases no pain; at the same time obtaining by absorption and by the internal use, all the good effects of the puccoon.

"The next object was to adapt the treatment to non-ulcerated tumours; and, as a preliminary step, the cutis was destroyed by nitric acid, and the paste applied; but it was found that the eschar produced by each application was so thin, that it would require a long time to remove a large tumour.

"Incisions about half an inch apart were then made through

the eschar, avoiding the living tissues, and the paste spread upon strips of cotton inserted into them daily; this plan succeeded admirably, and is *believed to be entirely original*.

"It was also found that although the action of the puccoon was much hastened by the addition of the zinc, yet it was slow enough to allow its complete absorption, thereby enabling it to exert its peculiar constitutional effects, and at the same time removing the diseased mass in a few weeks.

"The compound generally used is prepared according to the following formula:—

℞ Sanguinariae Canadensis, ʒss. vel ʒi.
Chlor. Zinci, ʒss. vel ʒij.
Aqua, ʒij.
Pulv. Sem. Tritic. Hibern., q. s.

Mix, and form a paste the consistence of treacle.

"Sometimes the sanguinaria is used in the form of a decoction, by boiling it down in water from four to two ounces: in this case no water is used in mixing the paste.

"The proportions of the sanguinaria and zinc are varied in different cases according to the effect produced.

This is spread upon strips of cloth, cotton, or wool, and inserted daily into the incisions; generally in the course of two to four weeks the disease is destroyed, and the mass falls out in the course of ten or fourteen days afterwards, leaving a flat healthy sore, which generally heals with great rapidity. This treatment refers chiefly to those cases that are well marked, or that have made some progress in their destructive career; but we often meet with other cases of an incipient nature, where the disease, although fully developed, is still in a quiescent or dormant state. In such cases I often accomplish a cure by means of absorption, giving no pain to the patient, and not injuring or removing any important part, as the breast, which must occur if the first mode of treatment is resorted to. Not only is this of use in incipient cancer, but I have seen it of much use when applied to the lymphatic glands, which had become secondarily affected. In such cases, I remove the part primarily affected, *en masse*, by means of the sanguinaria paste, applying at the same time the following ointment spread upon cotton over the enlarged gland or secondary tumour. This ointment is composed as follows (and called the brown ointment):—

℞ Sulph. Zinci, ʒvi.
Sanguinaria, ʒij.
Myricæ Ceriferae, ʒj.
Extr. Opii (aquos.)
Ext. Conii, aa ʒvi.
Ungt. Cetacei, ʒvi.

Mist. et fiat ungt.

"In conjunction with this preparation, I use an ointment of the iodide of lead, generally applying each twelve hours alternately. The following is the formula used:—

℞ Iod. Plumbi, ʒj.
Glycerine, ʒj.
Ungt. Cetacei, ʒij.

Fiat ungt.

"With a steady persevering use of these two ointments I have often dispersed incipient tumours, which I have no doubt were cancerous.

"These are the external means of treatment I employ, which, although in themselves eminently successful, yet I am not content with them alone, but also pay particular attention to the general health, ordering a nourishing and sustaining diet, besides giving internally the puccoon in small and repeated doses. A remedy that exerts so much influence when applied externally, must be exhibited with caution; I therefore seldom exceed half-grain doses, three times daily. This is given in the powder or decoction; in the former cases I give it either alone or combined with the sixteenth or twentieth of a grain of the iodide of arsenic and one grain of the extract of cicuta made into a pill; or, if given in decoction, I generally combine it with the fluid extract of taraxacum.

"The ointment of the sulphate of zinc I have been in the habit of applying, with marked success, in cancer of the womb. Unlike the Vienna paste, it can be applied not only with safety, but with impunity, as it does no injury to the adjoining tender parts.

"I have also used these preparations with marked benefit in cases of lupus, both exedens and non-exedens; indeed, I have never known a case in which the judicious use of these remedies has failed.

"Indolent ulcers have long been an opprobrium to the pro-

(a) Wood and Bach's *United States Dispensatory*, p. 628.

fession from their intractable nature: in such cases these applications are most efficacious, as I have known phagedænic and indolent ulcers of long standing to be speedily and permanently cured in the course of two or three weeks. In such cases I have often accomplished a cure by using the sanguinaria alone, but even then I find much benefit in using the combinations as described in the above formulæ.

"Having given in detail the mode of preparing and applying the remedies, it only remains to state the results of the treatment as compared with the removal by the knife; and in doing so I shall employ the tables generally adopted by writers upon the subject, viz., that from eight to eight and a fraction out of every ten cases operated upon return within two years; whereas it is found, that out of every ten cases treated by the puccoon only about three return in the same time.

"The first patient suffering from cancer and treated with the puccoon of whom I have any knowledge is still living in the enjoyment of good health, although the disease was removed fifteen years since.

"Another advantage of this plan of treatment is, that a great number of cases that no surgeon, however fond of the knife, would venture to operate upon, can be treated with a fair prospect of success. (Such cases are not included in the above comparative statement.)

Now there are certain passages in this statement of Dr. Fell which we cannot permit to pass unchallenged. First, as to the *Sanguinaria*, we have not the slightest hesitation in expressing our conviction that the *Sanguinaria* has little or nothing to do with the results of the application, and that the chloride of zinc is the only active agent. The effects of the caustic as described by the Surgeons of the Middlesex are precisely those described by Canquoin, Maisonneuve and others who have used the chloride of zinc in paste in France; they are precisely those observed years ago by Sir Benjamin Brodie, and more lately by Mr. Haviland and Mr. Moullin in this country; they are also very similar to those obtained by Mr. Stanley at St. Bartholomew's by the use of dilute solutions of the chloride of zinc. The *Sanguinaria* does not appear to be even as useful as the ranunculus and coltsfoot mixed with the arsenical paste used in the last century by Plunket and Guy. This had the effect of blistering the skin, and doing away with the necessity for cauterizing it with nitric acid after the fashion of Dr. Fell; but the *Sanguinaria* used in Dr. Fell's formula with the chloride of zinc, though it may possibly have some sedative or astringent action, is in all probability chiefly retained as a colouring matter, and as a drug not easily procurable in this country.

If then Dr. Fell's caustic be nothing new, nothing but the chloride of zinc so well known to all surgeons, we have to inquire if there be anything in the mode of application for which Dr. Fell deserves any credit. He says his plan of incising the eschars and reapplying the caustic in order to hasten its action is "*believed to be entirely original.*" It is our duty to say, in plain terms, *it is not original.* It is an old method, well known to surgeons who are much in the habit of using caustics. It has even been applied to the very purpose of removing mammary cancers, just as Dr. Fell applies it. In the well-known pamphlet of Mr. Justamond, Surgeon to the Westminster Hospital, published in 1780, and found in all Medical libraries, entitled "*An Account of the Methods pursued in the Treatment of Cancers and Scirrhus Disorders and other Indurations,*" this surgeon describes the method of removing the skin from over non-ulcerated cancers by "*lunar caustic,*" then applying an arsenical paste, and when the slough was beginning to separate, he says, "*in expectation of facilitating this separation, I made a few scarifications on the destroyed surface, and filled the crevices with some of the powder.*" So he goes on just as Dr. Fell does, only using arsenic instead of chloride of zinc, until "*the gland came out as entire as a nut out of a shell, or as if it had been cleanly dissected with a knife.*" Maisonneuve has long used the chloride of zinc in a manner even more effectual than this, by making long narrow stylets of the chloride, mixed with flour and water, which, when dried, are pushed quite into the centre of malignant tumours.

We may, therefore, express our conviction that, neither in the caustic he uses, nor in his mode of applying it, is Dr. Fell entitled to the smallest credit.

Now, as to his cases. He has given notices of 25 cases, selected from 75 in his note-book. The first case treated in 1855

died of pulmonary disease; no *post mortem* was made. Second case, treated in November, 1855; tumour removed in December, 1855; wound cicatrized in February, 1856: April, 1857, no return, woman apparently well. Third and fourth cases, treated in February, 1856; fifth and sixth in April, 1856; seventh and eighth in May, 1856: in all of these a mammary cancer is said to have been removed, and the patients remained quite well in April, 1857. In the ninth case the caustic failed to arrest the growth of a malignant tumour of the lower jaw. The tenth case, treated in June, 1856, is clearly one of an innocent tumour, which might have been removed much more readily by the knife than by any caustic, and with far less pain. In the eleventh case, treated in June, 1856, fungous growths sprung up from the ulcer left after the separation of the slough; but in April, 1857, it "*seems as if it would heal.*" In the twelfth case, treated in May, 1856, a cauliflower excrescence of the uterus was treated by the caustic so far successfully, that in March, 1857, the patient was able to take "*moderate exercise, without pain.*" In the next case, a "*fungoid cancer of the right breast,*" treated from June, 1856, to January, 1857, was removed. Pains came on in an enlarged axillary gland; this was removed, and the wound healed. Three cases of small superficial growths follow. They were removed in June, 1856, and January, 1857, and have not yet returned. The following cases, treated in August, September, and October, 1856, show that mammary tumours have been removed by the caustic, and the resulting ulcerated surfaces have cicatrized; but it would be absurd to argue more from these cases. If in two years there is no return of the disease these cases may be cited as some authority. The reports of the two concluding cases are furnished by the surgeons of the Middlesex Hospital. In the first, a large open cancer of the right breast was removed, between the 22nd of January and 18th of March, cicatrization being completed by the 19th of April. The second is one of a class of cases in which the chloride of zinc will probably come into more general use than heretofore. A cancerous tumour, affecting the orbit, was completely and safely removed by the caustic, whereas no prudent surgeon would have liked to use the knife in uncertainty as to the extent of the disease.

This is not the place to discuss the relative merits of the knife or caustics in the removal of cancerous tumours, but we may express a very decided opinion founded upon Dr. Fell's book, his own account of the cases he has treated, the report of the Surgeons of the Middlesex Hospital, and our own observations of cases which had been under Dr. Fell's care, that the removal by his method is very tedious, often excessively painful, and, so far as any evidence has yet been offered, affording no more security against a reproduction of the disease than the more rapid, and infinitely less painful, use of the knife. In some exceptional cases, where the knife cannot be used with safety, or will not be submitted to, the chloride of zinc is deserving of more general application in this country.

We have thus far criticised Dr. Fell's book as if it were the production of a gentleman legitimately exercising the Medical profession. It must be remembered, however, that Dr. Fell has identified himself with another class of practitioners, by the use, for eighteen months, of a secret remedy for his own profit. We do not know what the rules and regulations of the University of New York may be, but we can easily imagine that the respectable members of that body must look upon the practice of their colleague in this country with feelings the very reverse of pride or satisfaction.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON MOVEABLE KIDNEYS.

By Professor OPPOLZER.

The knowledge of the possibility of the existence of this affection is of importance to the practitioner, as, when unaware of it, he may suppose the appearances observed to result from various other causes, and submit the patient to an injurious course of treatment, or give rise to unnecessary alarm upon his part. The abnormal moveability usually

affects but one kidney, and especially the right one; but the author has met with cases in which it was observable in both, and that in a remarkable degree. In all the cases he had the opportunity of examining, the patients dying of some other disease, the kidneys were found healthy; but in these cases there has been observable a deficiency in the cushion of fat, and an extension of the renal vessels. In some cases the practitioner's attention has been drawn to the abnormality by the patient observing a tumour on one or both sides of the abdomen, which only became perceptible while standing, or lying on one or the other side, disappearing again during the horizontal posture. Generally speaking, however, it is first discovered by careful exploration, when, beneath the relaxed, painless, and not very obese abdominal parietes, a largish, rounded tumour is perceived deep under the liver or stomach. The inner concave side can only be felt in very thin persons, and the upper end is only accessible in some. The tumour can easily be pushed upwards, and then may suddenly disappear, but it cannot be pressed against the spinal column, or downwards below the crista ilii without great pain being produced. To very firm pressure, made in any direction, the tumour is sensible; and the patient spontaneously complains of a sense of pressure and dragging, especially when standing, performing active movements, during defæcation, etc. In the cases seen by the author, the condition of the urine has been normal.

The affection is usually congenital, as is shown by the lengthened condition of the vessels. Rapid emaciation occurring in persons formerly fat, concussion of the body, as in rough travelling, constipation, etc., may probably contribute to its production. In fat persons the diagnosis may be impossible, but it is not difficult in those who are thin, as the form of the swelling can be traced, while the tumour can be pushed into the lumbar region, and there felt. The pain which it not unfrequently gives rise to cannot be mistaken for neuralgia, colic, or rheumatism, if the practitioner will only make an exact exploration; while the tumour resulting from a collection of fæces assumes another form, and does not appear in, or disappear from the lumbar region in consequence of pressure. It may also be distinguished from a moveable spleen, as the latter lies in front of the intestines under the parietes, and gives rise to dulness on percussion, which the kidney does not. It can only be confounded with cancerous and tubercular masses, when these are moveable, and resemble the kidney in form. Treatment of this affection by bandages, and the like, is of no avail; and the removal of pain when present must chiefly be sought from the horizontal posture. Confinement of the bowels, and the consequent straining, must be avoided. It is, however, of great importance to be able to tranquillize the mind of the patient as to the nature of the affection, and to prevent injurious measures being adopted; and hence the value of a correct diagnosis.—*Wien Wochenschrift*, 1856, No. xlii.

ON BLOOD-LETTING IN PNEUMONIA.

By PROFESSOR WUNDERLICH.

In the course of five years, there have been treated at the Leipsic Klinik 204 cases of pneumonia, of which number 36 (17·06 per cent.) ended fatally: but if we abstract from these those cases which were brought to the Hospital *in extremis*, and count only those which were actually treated there, there were then 190 cases with 11 deaths (11·57 per cent.) Among the fatal cases 3 were treated by bleeding, as were 44 of the cases that recovered, making the mortality of these so treated 6·38 per cent. These fatal cases were examples of pneumonia complicated with the disease of other organs.

In 114 of the patients loss of blood occurred during the course of the pneumonia, whether from local or general bleeding, epistaxis or menstruation; and of this number 9 (including the 3 treated by bleeding), died, *i.e.* 7·89 per cent. In 76 cases, no loss of blood whatever occurred during the progress of the case, and of these 13, or 17·10 per cent. died, not including persons brought in agony, and who had not in general been treated by bleeding. Thus it results that,—1. In cases in which there was loss of blood in general the mortality was 7·89 per cent. 2. In those in which venesection had been employed 6·38 per cent. 3. In those in which a complete conservation of blood took place a mortality of 17·10 per cent.

The author enters into an elaborate comparative statement of the influence which the loss of blood exerts upon the time

and mode of termination of the fever and of the commencement of the healing process. Pneumonia, he observes, possesses, in the vast majority of cases, the peculiarity of commencing with very determinate symptoms (severe chills, unequal distribution of the blood, and rapid increase of the objective temperature of the trunk), which are immediately followed by acute continued fever (increase of temperature, rapidity of pulse, etc.) In favourable cases there is this further peculiarity, that at about the period of the completion of the exsudative process (cessation of increased dulness on percussion, and of the bloody sputa), the febrile symptoms rapidly disappear, the delirium alone continuing awhile, if it has been very violent. In this respect pneumonia approaches the eruptive fevers, and forms a contrast to other inflammatory diseases, as abdominal typhus, pleurisy, peritonitis, meningitis, bronchitis, etc. Wishing to avoid the ambiguity which would ensue upon the adoption of the word crisis, the author designates this passage of the economy from a feverish to a feverless state, *defervescence*. It is no accidental occurrence, but a process which is sometimes rapid sometimes slow, and may be complete or incomplete, protracted, uninterrupted, or remittent. A rapid defervescence is decisive for the quick convalescence of the patient; but while cases in which it is remittent are rare, yet when it is protracted or interrupted it is of bad augury for the patient even when the disease is slight.

As a standard for judging the effects of therapeutical agents upon the period of defervescence, the Professor first selects 32 cases treated by expectation, and in which the exact time of its commencement was noted. Taking 10 of the severe and 10 of the medium cases, the defervescence commenced at the 7th or 8th day; but taking the entire number, in adding 12 slight cases it occurred at the 6th or 7th day. Judging from 9 cases which came under his notice (2 of menstruation and 7 of epistaxis), spontaneous bleeding proved rather favourable, as the improvement dated from the appearance of the bleeding.

Local without general bleeding was followed by recovery in 36 cases. In 26 it was employed either alone or in conjunction with medicines, such as digitalis or ipecacuanha, which exert no appreciable effect in expediting the period of defervescence; and in 10 it was combined with tartar emetic, which does exert an effect of this kind. Of the 1st series rapid defervescence took place in 7 slight and medium cases in from the 3rd to the 6th day, and in 19 bad cases it varied from the 2nd to the 9th day. In the 10 cases of the 2nd series it took place from the 3rd to the 7th day.

In 39 cases in which the commencement of the disease could be accurately ascertained, venesection was employed. First in 18 of these it was employed on the 1st or 2nd day. In 10 of these there was immediate arrest of the process; in 2 immediate arrest with a somewhat slower continuance of improvement; in 5 a considerable diminution of fever, with a later but less considerable return, the fever ceasing in 4 cases on the 6th, and in 1 on the 7th day. In 1 no effect was produced, improvement following only after local bleeding. Secondly, in 21 the venesection was performed from the 3rd to the 5th day; but in none of these cases was bleeding the only means employed. The results obtained even here contrasted very favourably with those obtained by expectative treatment. It was found that the conjunction of tartar emetic hastened the period of defervescence somewhat, that of local bleeding was scarcely of any effect, while the addition of digitalis was of no effect whatever.—*Virchow's Archiv.*, 1856, pp. 17-39.

REVACCINATIONS IN THE PRUSSIAN ARMY DURING 1856.

DURING the year 1856 there were either vaccinated or re-vaccinated 44,222 individuals. Among these,

Cicatrices of prior vaccinations were plain in	36,668
The cicatrices were indistinct in	5,157
There were no cicatrices in	2,397
	<hr/>
	44,222

The results of the present vaccinations were

Regular in	28,785
Irregular in	5,777
No effects in	9,660

The vaccination was repeated in the 9660; with effect in 2531, without effect in 7129.

The number of vesicles produced was as follows :—

1 to 5 in	14,178
6 to 10 in	9,275
11 to 20 in	7,004
21 to 30 in	859

Among the soldiers revaccinated with success in 1856 or in former years, there occurred during 1856, 2 cases of varicella, 4 of varioloid, and 1 of variola.

Thus, of 44,222 persons vaccinated during 1856, in 28,785 (and including those vaccinated with success after a first failure, 31,316), the pustules pursued a completely regular course. That is to say, the vaccinations succeeded at the rate of 65 per cent., or, including the repetitions, 70 per cent. This proportion has of late been on the increase; for during the two immediately preceding years it was 63 per cent., or 69, including successful repetitions.

Throughout the entire army during 1856 there occurred 21 cases, 5 being examples of varicella, 13 of varioloid, and 3 of true variola. Among the soldiers who had not been revaccinated varicella occurred in 1, and varioloid in 6; among those who had been revaccinated, but without effect, there were 2 cases of varicella, 3 of varioloid, and 2 of variola; and among those revaccinated with success there occurred, as already stated, 2 cases of varicella, 4 of varioloid, and 1 of variola. No case throughout the entire army terminated fatally; and all the cases, with the exception of one, were very slight.—*Berlin Med. Zeitung*, 1857. No. 14.

EXCERPTA MINORA.

Pæonia Officinalis in Convulsions.—Dr. Livezey reports that he has found, when no obvious indication of treatment existed, that this popular remedy may be administered with advantage. Half a teaspoonful of the grated dry root is to be scalded, sweetened, and given (three times a day) to a child from three to five years old.—*Boston Journal*, vol. lv. p. 466.

Return of an Inverted Uterus under Chloroform.—In this case complete inversion of the uterus took place forty-eight hours after delivery, during an attempt to evacuate the bladder. Dr. Bennett saw the case thirty-one hours afterwards, and succeeded in reducing the organ under the influence of chloroform, after long and persevering efforts.

American Journ. Med. Science, April, p. 558.

Musk in Spasm of the Glottis.—Of 24 children affected by spasm of the glottis, and treated by musk, by Dr. Salathé, only 2 died. In 17 the diseases became arrested, and the children cured after some days of treatment. In the 7 others amendment was followed by relapse calling for other means in addition.—*Revue Médicale*, May, p. 565.

Cinchonine in Gastralgia.—Dr. Franchini strongly recommends this substance, giving gr. $\frac{2}{3}$ in two scruples of calcined magnesia four times daily, or gr. $\frac{1}{2}$ in the form of pill three or four times a day.—*Revue Méd.*, May, p. 567.

Chloroform in Sea-sickness.—Dr. Landerer, of Athens, states that 10 or 12 drops of chloroform given in a little water acts as a specific in sea-sickness.—*Union Méd.* No. 64. (We referred to this statement last year, and have heard lately that a celebrated London accoucheur is in the habit of inhaling it whenever he crosses the Channel.)

FOREIGN CORRESPONDENCE.

FRANCE.

[From our Paris Correspondent.]

PARIS, 1st June, 1857.

THE readers of the *Medical Times and Gazette* know the results of the remarkable experiments made in Paris two years ago before the Society of Biology by one of the most learned physiologists of our days, Dr. Brown-Séquard, upon the sensibility of the spinal marrow. They recollect that those able researches were made on small animals, such as dogs, cats, rabbits; that a commission appointed by Dr. Rayer made a valuable report on numerous experimental inquiries, and Dr. Broca, the reporter, maintained all the conclusions adopted by Brown-Séquard. Thus the classical knowledge about the physiology of the spinal centre was overthrown. It was believed that the sensitive impressions of the body and limbs

were conducted to the brain by the posterior cords of the spinal marrow. Brown-Séquard showed that these cords had no such property, and that was the capital point of all his experiments. Afterwards he tried to prove that sensitive impressions were transmitted to the brain by the central grey matter of the nervous spinal axis. M. Chauveau, a skilful veterinary lecturer, who published last year valuable researches upon the causes of the sounds of the heart, has just investigated in his turn the physiology of the rachidian cord. He related a week ago to the Academy of Sciences the results of more than a hundred vivisections and observations made upon large animals, horses, asses, oxen, and cows. His conclusions are :—
1. That upon mammiferous animals the section of the posterior cords does not prevent the conduction of sensitive impressions.
2. That the conductivity of the spinal axis persists even after the complete destruction of the grey substance in a limited spot.
3. That the antero-lateral cords are the true way of transmission of the impressions.
4. That all slight wounds of the spinal cord are followed by real hyperesthesia.
5. That the posterior cords do not appear sensible.
6. That these cords and the grey substance are the seat and the cause of reflex phenomena.

I will not try to decide here the debated points between MM. Brown-Séquard and Chauveau: I will only say that, whatever may be the value of the last physiologist's views, they have been all of them inspired by Brown-Séquard's experiments. The merit and the glory of a discovery belong to the inventor, even when his first trials have been deficient and imperfect. Moreover, till now nothing proves that the results of the first physiological inquiry about the action of the different cords of the spinal axis are to be altered.

Dr. Civiale, the inventor of lithotripsy, has left a legacy to the hospitals of Paris of a yearly revenue of £60, for the Surgeons who may be appointed after his death to take charge, at Necker's Hospital, of the patients affected with stone and other diseases of the urinary organs. Such bequests are very uncommon in France; and Dr. Civiale's gift will, we hope, be a good example to the Profession. Perhaps these donatives would have a better effect if it were enjoined not only to take care of the patients, but to lecture on certain days upon those diseases, the knowledge of which is not practically taught at the Faculty of Medicine.

Dr. Robert has read, at the Academy of Medicine, a valuable report on the anæsthetic properties of amylene. When Dr. Snow's paper in your journal was read in France, M. Giralde, one of our most learned surgeons, a man well acquainted with British medical literature, was the first who tried the new anæsthetic substance. Some months after, Professor Courdes, of Strasburg, communicated to the Academy his observations upon that subject. At last, Dr. Debout wrote in his turn upon the question. I doubt whether any new fact has been brought to light by these different inquiries. The trials of Giralde appear to have a true practical value, as they are the most numerous. Robert has observed the insensibility after two or three minutes; seldom after six or seven. Three patients have been refractory to the action of amylene; upon the others, forty-five in number, there was no agitation as with chloroform, no muscular relaxation; there was free breathing, and no fear of suffocation as it happens sometimes in chloroformisation. The experiments made upon animals have shown to Dr. Robert that amylene is less poisonous to them than chloroform. He thinks that it should be used in short operations, upon children, and in cases where there is some affection of the air passages.

The opinion of Velpeau is not favourable to the use of amylene. He reproaches that substance for its bad smell, its uncertain and changeable action, and the necessity of a peculiar apparatus. I think that for these reasons chloroform will remain as yet the most frequently used and the best of anæsthetic liquids. I have heard of two new formulas of Professor Croupeau which are not yet employed at large, but which deserve being known. Against the *laryngeal catarrh* he prescribes the syrupus boracis: syrupus simplex ten ounces, borax half an ounce; ten teaspoonfuls to be taken daily. In cases of *purulent otitis* following scarlatina or measles, he uses at first injections with *tar water*; afterwards he prescribes the following ointment for application twice a day :—Calomel and binocide of mercury, of each seven grains, oil of olives, one drachm, lard, half a drachm. When these applications are not successful it becomes necessary to use the solution of sulphate of copper or of nitrate of silver, and sulphurous baths.

GENERAL CORRESPONDENCE.

TREATMENT OF ANEURISM BY MANIPULATION.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your last week's journal there is a case, recorded by Mr. Little, of subclavian aneurism cured by "displacing a portion of its fibrinous contents." The operation was performed after the plan recommended and practised by Mr. Ferguson.

There is one source of great danger, to which, as I think, the patient is subjected in the performance of these manipulations upon aneurisms of the cervical arteries. To this Mr. Little has not alluded, but it is nevertheless worthy the consideration of those surgeons who may be inclined to follow this particular practice.

The danger I refer to is, that of the possible escape of some of the coagulated portions of the contents of the aneurismal sac into the carotid or vertebral arteries during the kneading process to which the aneurism is subjected, and, consequently, the production of sudden and serious injury to the central circulation by the blocking up of those arteries, or of some of their branches.

That the danger is not altogether of a theoretical nature, I may show by referring to a case of aneurism of the aortic sinuses, which I exhibited to the Pathological Society during the past session.

In this case, the arteria innominata and the right carotid and right subclavian arteries were found blocked up by firm coagula, so likewise was the termination of the left internal carotid within the cranium. There was no disease of the valves of the heart, no fibrinous heads or fringes around them, such as might possibly have been displaced and carried along in the current of the circulation, after the manner so well described by Dr. Kirkes. Neither were there any local signs of disease of the vessels. Under such circumstances, it seemed very reasonable to conclude that fibrinous coagula (which were indeed hanging in loose softened shreds about the opening of one of the aneurisms of the aortic sinus), had escaped from the aneurism, and, becoming impacted, had caused the stoppage of the circulation and the formation of clots in the vessels referred to.

It will, perhaps, be thought that there is little danger of the "displacing," pushing back a shred of coagulum into the carotid from the subclavian aneurism; but I can imagine that the accident may possibly occur during the manipulation requisite for the purpose in view. In the case of the vertebral artery, the accident might readily enough happen.

The objection to the operation, which I here speak of, of course does not apply to the manipulations as applied to the other arteries of the body.

I am, &c.

Clarges-street, W., May 26, 1857. W. O. MARKHAM.

THE ARTIFICIAL MEMBRANA TYMPANI.

[To the Editor of the Medical Times and Gazette.]

SIR,—My attention has been directed to a paper in the current number of the *Medical Times*, from the pen of Mr. Toynbee, "On the Use of the Artificial Membrana Tympani," in which I perceive he still maintains the necessity of effecting a closed cavity as essential to success in the application which he has adopted in lieu of the wetted cotton remedy. Now, Sir, I hope you will allow me to express my conviction that Mr. Toynbee is decidedly wrong, and that so surely as he succeeds in shutting up the opening in the membrane, as surely does he fail in improving the hearing, whatever be the material employed, whether it be the original wetted cotton or the substitution of vulcanised india rubber, the effect will be the same failure. The more experience I have of this important invention, the more I am satisfied that my theory of its *modus operandi* is correct. It must neither be a plug nor a covering over of the perforation, it is a support to the remaining portion of membrana tympani and to the opicula, and nothing more; hence it is that any material, if properly placed, will produce the desired effect, but so long only as the substance employed, whether it be cotton wool, gutta percha, vulcanised india rubber, a piece of wood, a piece of whipcord, or a strip of bacon-fat, retains its position on the magical spot.

Having originated this valuable principle of treatment in aural disease, I am naturally desirous to combat erroneous notions respecting it, and this must be my excuse for thus troubling you.

Not only with respect to this question of a closed or open cavity should unanimity prevail, but also as to the best material or appliance to be used. Of the preference to be given to cotton wool I am quite assured—others may differ with me. I am willing, therefore, and indeed desirous, to submit the matter to any competent tribunal of medical men or commission of inquiry to decide these questions.

I am, &c.

15, Saville Row, June 2, 1857.

JAMES YEARSLEY.

TREATMENT OF VESICO-VAGINAL FISTULA.

[To the Editor of the Medical Times and Gazette.]

SIR,—In a communication by Dr. Minturn, in the last number of your Journal, this gentleman appears to consider that the method of operation for vesico-vaginal fistula by vivifying the edges of the fistula with the electric cautery, and afterwards bringing them together by means of the suture, originated with himself, because he had spoken with some gentlemen in Paris, about a month ago, as to the possibility of doing this. Although a matter of trifling import, still the facts of this case are as follows:—A patient came under my care, at the Samaritan Hospital, in November, 1855, suffering from vesico-vaginal fistula, and I determined to try the effect of the electric cautery. This was applied several times with but little permanent benefit upon the size of the opening; and in the autumn of last year I discussed with my colleagues the possibility of retaining the granulating edges in apposition by means of sutures, until they had united. It was not, however, until the 16th of February of the present year that I had an opportunity of putting this suggestion to the test of experience, by bringing the granulating surfaces in apposition with sutures. This also failed to effect an obliteration of the opening; and in considering the causes of the failure, it appeared that the kind of suture employed was not the most suitable, and that the granulating condition was not the most favourable for a union to take place. The relative advantages of different sutures were then considered, and amongst them the *serre-fines*, with holes at their extremities, through which the suture pins passed. Finally the hare-lip suture was selected; and I also decided to place the edges in as favourable a condition as possible for union by the first intention, by scraping the granulating surface with the scalpel, immediately before the application of the sutures. This plan was carried out on the 16th of March, and with the most happy result; for a complete and permanent cure was effected in a fistula sufficiently large to admit the end of the finger, and which had resisted, for twenty-five years, all other means of treatment.

The same method has since been employed by my colleague, Mr. Spencer Wells, on a fistula, most unfavourably situated, and which had been seven times unsuccessfully operated upon by different surgeons and up to the present time, the twelfth day, with every prospect of success.

I am, &c.

Langham Place, June 1.

T. SNOW BECK.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 26, 1857.

Sir CHARLES LOCOCK, Bart., President, in the chair.

A paper by Dr. MARKHAM was read on

A CASE OF DISEASE OF THE HEART, WITH GREAT DILATION OF THE AURICLES.

THE subject of the following history came under the observation of the author three days before his death. He was sixty-nine years of age, and had been subject to cough for forty years. Twenty-six years ago he suffered from dropsy, and his life even was despaired of, on account of the extent of

the dropsical effusions. Fifteen years ago he was told that the dropsy, the spasms, the short breath and palpitations from which he suffered were the consequences of disease of the heart. These particulars showed that for about thirty years the patient had been the subject of organic disease of the heart. Of late years the symptoms of heart disease had increased; exertion of any kind was very difficult, and brought on severe spasmodic attacks. When first seen by Dr. Markham the last agony was manifestly near at hand. He could not lie down in bed; his breathing was laboured; his pulse rapid and irregular. The scrotum and legs were distended with serum. The heart was felt beating with an extensive heaving impulse in the left lateral thoracic region, and also over the precordial region; the percussion sound over this region was extensively dull. At a point about one inch and a half from the right edge of the sternum, and in the fifth intercostal space, a pulsation, synchronous with the ventricular systole, was visible over a space of about three-quarters of an inch; it communicated a strong thrill to, and forcibly raised, the finger. The stethoscope transmitted a loud bruit when placed over it. It was evident that the heart was much enlarged, and that there was extensive valvular disease in this case. But what occasioned the pulsation here described? The thrill and the bruit naturally suggested the idea of an aneurism; but how could an aneurism exist at such a part, and apparently without any connexion with the heart or its great vessels? On the other hand, that the pulsation had no origin from the heart itself seemed indicated by the fact that the organ was felt beating in the left lateral region of the thorax. It was scarcely conceivable, indeed, under such circumstances, that any portion of the heart could occasion a pulsation so far away to the right edge of the sternum.

Necropsy.—On opening the thorax, the pericardium was found so distended as to reach across the chest, almost from side to side; its horizontal contrasted remarkably with its vertical diameter, and could not have been less than eleven or twelve inches. This enormous dilatation was caused by the dilated heart, and particularly by its auricles. On removing the organ, about three pints of blood, fluid and coagulated, escaped from its cavities. When the blood was wholly removed the heart fell together like a flabby membranous mass, having no trace of firmness in its texture. The right auricle occupied that portion of the chest, beneath the parietes, where the pulsation was felt; hence the pulsation, the thrill, and the bruit took their origin within the right auricle. Both auricles were greatly dilated, especially the left, which measured sixteen inches in its widest circumference. The auricles also were reduced to the condition of mere membranous bags, no muscular tissue being perceptible in them, except in the appendix of the right. The right ventricle was dilated and hypertrophied; the left ventricle somewhat dilated; and the muscular tissue of both ventricles was in an advanced stage of fatty degeneration. The tricuspid opening was enlarged, but its valves were also enlarged and capable. The mitral opening was contracted into a hard narrow slit, about one inch long; the mitral valves being contracted, thickened, and united. The aortic valves were thickened, but capable.

Remarks.—Such a pathological specimen rarely falls under the observation of the physician. That such deviations from a healthy condition of the heart are, for a long period, compatible with existence, is an interesting fact. The patient, it should be remarked, had both the means and strength of mind sufficient to subject himself to a rigid discipline in diet and exercise, experience having taught him that great suffering resulted from the slightest deviation from the rules prescribed for his guidance. In physical diagnosis, Dr. Markham points out, that the case presents some special points of interest. It demonstrates, that a pulsation felt low in the right thorax, an inch and a half from the right edge of the sternum, may be cardiac, even though the heart be felt at the same time pulsating in the left thoracic region. Again, a heaving pulsation in this latter region does not always indicate hypertrophy of the left ventricle, for here it was nearly normal in size. The thrill, bruit, and pulsation arising in the right auricle are strange phenomena. How were they caused? They occurred during the auricular diastole, and probably had, all three, a like origin. It does not seem probable that they were produced by tricuspid regurgitation, for the tricuspid valves were large and sound, and the bruit, rough and loud, was not of the soft bellows-blowing kind. Thrill, again, over the right auricle, our best authors tell us, associated with tricuspid regurgitation, is

unknown to them. These phenomena, then, may perhaps have had their origin in the rush of blood into the auricle from the venæ cavæ—a source of cardiac bruit not recognised in auscultation. The absence of muscular structure in the auricles proves that the force of the venous current is of itself sufficient to carry the blood on into the ventricles, unaided by any auricular contractions; and even when, as in this case, the circulation is impeded by a contracted mitral orifice. This case is very interesting, as showing the extraordinary degree of deviation, from its healthy state, of the heart, with which a long life is compatible, under certain conditions. It presents, in physical diagnosis, certain unwonted phenomena, little in unison with ordinary experience. It gives us a hint respecting the physiological action of the auricles; and it points out the value of medical art, in prolonging existence, when serious organic change has fallen upon a vital organ.

(To be continued.)

MEDICAL REFORM.

LAST week an influential deputation of the Medical profession had an interview with Sir George Grey at the Home-office. The deputation consisted of Dr. Mayo, President of the College of Physicians, London; Dr. Alderson, Treasurer of the College, Dr. Hawkins, Registrar, Dr. Burrowes, Member of the Council, and Senior Physician to St. Bartholomew's Hospital; Mr. Travers, President, and Mr. Joseph Henry Greene, and Mr. Stanley, Vice-Presidents of the College of Surgeons, England; Dr. Williams, Dublin, President of the College of Surgeons, Ireland; Dr. Neligon, senior censor of the King and Queen's College of Physicians, Ireland; Dr. Hunter, President of the Faculty of Physicians of Glasgow; Dr. Wood, President of the College of Surgeons of Edinburgh; Mr. Tegart, Chairman of the Court of Examiners of the Society of Apothecaries, London; Mr. De Vere, of the Court of Assistants, &c.

Dr. Mayo introduced the deputation, and in doing so said he trusted that the profession at large had arrived at such an amount of unanimity as was possible when it was considered into how many sections they were divided, greater than had ever obtained before. They had come to support the Bill of Mr. Headlam, for whatever was good in Lord Elcho's Bill was to be found in Mr. Headlam's, with a good deal more of an equally essential character; that Mr. Headlam's Bill provided for one system of education open to all, but that it also provided for a more profound and more elevated education, and one requiring longer time, for those whose means or whose honourable ambition should enable them to engage in it. In this way Mr. Headlam's Bill provides for a progressive advance in practice and science, Lord Elcho's only for one minimum standard, which will itself, in the absence of eminent professors and teachers, be kept at a low level. He also said that Mr. Headlam's Bill contained a clause allowing to the Crown the nomination of six members of the Medical council, but that it did tend to discourage the profession or supersede its action in self-government, by making the whole council nominees of the Crown. This, he observed, would be the effect of Lord Elcho's Bill.

Sir G. GREY said, that it appeared to him the dissentients from Mr. Headlam's Bill and its supporters held similar views with respect to general principles, but different only on matters of details.

Dr. Mayo said, that the points of each differed, and it appeared to a great majority of the profession that those points were of vital importance.

Sir G. GREY was glad to hear that the Medical profession was so unanimous now, as Dr. Mayo had stated. He understood that the Bill brought in by Lord Elcho was not his own Bill, but one that he had taken up from some other person since last session.

The Hon. H. F. COWPER said, with regard to unanimity he had waited for that opinion, and therefore he took it for granted that it was settled among the profession to support Mr. Headlam's Bill.

Dr. WILLIAMS, President of the College of Surgeons, Ireland, said, that he had come expressly from Dublin, in company with his colleague, Dr. Neligon, to express the approval of the bodies with which they were connected of Mr. Headlam's Bill. Ten medical corporations were unanimous in

their support of it, and in condemnation of the measure of Lord Elcho. His Lordship's bill confiscated the revenues of the corporations, and took the management of their affairs away altogether, vesting that power in nominees appointed by the Crown. They had 21 licensing bodies agreeing with them. The Universities of Oxford, Cambridge, and London had not declared, but as far as they had spoken, they were in favour of the bill of the deputation.

Dr. WOOD, President of the College of Surgeons, Edinburgh, and Dr. Hunter, President of the Faculty of Physicians and Surgeons, Glasgow, followed with arguments on the same side, saying that their respective institutions had unanimously agreed to support the bill of Mr. Headlam as the best, and, in fact, the only bill of the profession.

Sir G. GREY, having asked some questions, thanked the gentlemen for the information they had given him, and the deputation then retired.

Mr. HEADLAM, M.P., also introduced a deputation of medical graduates, consisting of Dr. O'Connor, Dr. Maclean, Dr. Adlington, Dr. Sibbold, and another gentleman, upon the same subject.

Dr. O'CONNOR having fully explained their views, the deputation withdrew.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS, FRIDAY, MAY 29.

STATE OF LUNATICS IN SCOTLAND.

Mr. E. ELLICE called attention to the Report of the Commissioners of Inquiry into the State of Lunatics in Scotland, and the necessity of securing to pauper lunatics better protection and maintenance, the treatment of this unhappy class in Scotland (4,600 in number), evincing, according to the details read by Mr. Ellice, in many cases great neglect and cruelty as regards their reception, their custody, and their removal from one place to another. These details were of a most painful and even repulsive character, and Mr. Ellice did not hesitate to charge the authorities with culpable complicity, and asked the Government to visit them with direct condemnation.

Sir G. GREY was not surprised at the indignation manifested by Mr. Ellice at the gross cases of abuse and neglect revealed in the report of the Commissioners, and hoped that the perusal of that report would evince the hearty co-operation of Scotch members in providing a remedy for a radically defective administration of the law. He differed from Mr. Ellice only in one respect. The law had provided safeguards against these evils; the great defect was in the administration of the law. As soon as the report was in the hands of the Government (only 15 days ago) his attention was immediately given to it; he conferred with the Lord Advocate, and called the attention of the Board of Supervision to the gross neglect and abuses in the administration of the law disclosed in the report. Some of the cases of illegal neglect and cruelty were under the consideration of the Lord Advocate, who would in due time propose to Parliament a bill for remedying the present state of things in regard to pauper lunatics in Scotland.

Mr. DRUMMOND, Mr. F. DUNDAS, Sir T. COLEBROOKE, Mr. KINNAIRD, and Colonel SYKES having spoken upon the subject,

The LORD ADVOCATE said the state of things disclosed in the report had been a disgrace and scandal to the country. Every one of the suggestions of the Commissioners had been introduced into the bill of the Lord Advocate Robertson in 1848, and if that bill had passed, these abuses would have been put an end to. It was, however, resisted in Scotland, and large counties had petitioned against it; but now he believed, if he proposed these remedies, the bill would pass both Houses.

THE CHOLERA AND THE YELLOW FEVER IN SOUTH AMERICA.—It will be recollected that in the year 1855 the cholera, for the first time, passed over the river of the Amazons, and penetrated to the southern extremity of Brazil. The yellow fever, in its turn, has now for the first time taken the same course. It has broken out in moderate intensity at Monte-Video, where it never before appeared; the circumstance of these two epidemic scourges penetrating so near to each other into countries which had hitherto escaped their invasion, is certainly well worthy of attention.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 29th ult. :—

BRIGHT, R. S., Richmond.

BUSS, H., Barnsbury-grove.

CHANDRA, R. C., Calcutta.

CROMARTY, J. P., Aberdeen.

GULL, F., Stanway, near Colchester.

HEPWORTH, F., Croft's Bank, near Patticroft.

JAMES, H., Merthyr Tydfil.

ROWLANDS, J., Llanfer.

TRIMNELL, T. J., Cape of Good Hope.

WATTS, S. W., Army.

WRIGHT, R., Dublin.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise on the 28th ult.

DAVIS, WILLIAM HASLAM, Shelton, Stafford.

DAVY, FRANCIS JEFFORD, Knighton, near Newton Abbots, Devon.

EDWARDS, EDWIN THOMAS, Newcastle, Stafford.

HART, GRATIAN CHARLES BARRY, Bristol.

HIND, ALBERT, London.

MAUDSLEY, HENRY, Settle, Yorkshire.

M'WHINNIE, JOHN, Royal Navy.

WHITEFIELD, ARTHUR, Barnstaple, Devon.

DEATHS.

ANDERSON.—May 28th, at Jedburgh, Alexander Anderson, M.D.

GIBB.—Same day, at Dover, Mr. J. H. Gibb, Student of Medicine, University College, London.

GILL.—On the 2nd instant, at Islington, Mr. William George Gill. M.R.C.S. Eng. 1847; L.S.A. 1852; Fell. N. L. Med. Soc., aged 32.

GRUGGEN.—May 27th, at his residence, Chichester, suddenly, in a fit of apoplexy, H. M. Gruggen, M.D. St. And. 1845; M.R.C.S. Eng., and L.S.A. 1844; aged 36.

TESTIMONIALS.

TESTIMONIAL TO MR. DOBIE, OF CHESTER. — William Wright, Esq., of Gresford Bank, and John Townshend, Esq., of Trevallyn, being deputed by the subscribers to wait upon Mr. Dobie, at the residence of his son, Dr. W. Murray Dobie, in Chester, on Thursday last, a silver salver of the value of sixty guineas, with a purse of fifty guineas, were by them placed in the hands of their much-respected friend, with an illuminated address containing the names of more than a hundred subscribers, who had selected this mode of testifying their regard and their regret on his leaving their neighbourhood. The presentation was prefaced by a few appropriate remarks from both gentlemen, which were gratefully and touchingly responded to by Mr. Dobie.

THE NEWNHAM TESTIMONIAL.—[Letter from Mrs. Newnham to Sir John Forbes, the Secretary of the Committee.]—My dear Sir John,—I am at a loss in what terms to express my grateful feelings for the invaluable gift of the Portrait of my dear husband. This testimony to his long-devoted services in the cause of humanity, and to the high estimation in which his name is held by so many of his Professional brethren, is peculiarly dear to me, and will be the object of the deepest interest to me during the remainder of my life, and to our children after us,—for it has been settled upon our Medical son as an heirloom for ever. Will you have the kindness to insert in the Journal, if you think it right, my most grateful acknowledgments to all those gentlemen who have so generously contributed towards this Memorial, and assure them that nothing could have been so gratifying to my heart as this truly delicate mode of expressing their esteem and regard for him, whose whole life has been devoted to the self-denying duties of their noble Profession, and who will never cease to feel the liveliest interest in the welfare of his brethren, as well as in the progress and success of the MEDICAL BENEVOLENT FUND, which for so many

years has been the object of his unwearied labours. Thanking you for the kind interest you have shown on this and on many other occasions, I remain, my dear Sir John, your very truly obliged,—CAROLINE NEWNHAM. Richmond Villa, Tunbridge-wells, May 28, 1857.

THE TWO BILLS.—In a petition of the President and College of Physicians in London to the House of Commons, the petitioners say: "The Medical Profession Bill (No. 1) brought in by Mr. Headlam, Sir Wm. Heathcote, and Mr. Napier, in providing for registration, provides that the recognised division of the profession into physicians, surgeons, and general practitioners shall be respected and preserved: and with good reason, since otherwise there will be no sufficient security that any class or portion of the profession shall have the best and highest education which this country can supply. This bill also encourages education at the Universities in every branch of study preliminary or collateral to that of medicine. But it requires that the actual competency of students to enter upon practice shall be tested by those corporations which were founded expressly for this purpose, and which we may therefore assume to be, as they might readily be shown to be, the bodies best adapted to perform this important duty. The Medical Profession Bill (No. 3) brought in by Lord Elcho would fix a minimum of professional qualification, to be ascertained by a new board formed for this purpose, and without which no one shall be allowed to practise; but with which any one may practise in every capacity. Hence this bill would, to a great extent, destroy the inducements which now exist to seek higher qualifications than those which are merely sufficient for practice. Such an enactment would be fatal to the interests, and perhaps to the existence of all the Medical Corporations, including the Colleges of Physicians and Surgeons of England, Scotland, and Ireland, and the Society of Apothecaries of London. For who would seek the licences and diplomas of these bodies, when they could confer no additional privilege? Especially would such legislation be injurious to the Colleges of Physicians, whose diplomas are burthened with heavy stamp-duty. And as it would be left, by this bill, open to every practitioner holding the minimum qualification to obtain the degree of M.D. from some one of those Universities which have been in the habit of granting such degrees on much too easy terms, there would be nothing to prevent his passing as a physician, without admission into a College of Physicians, whilst the credit of that order would necessarily be lowered.

POOR-LAW MEDICAL REFORM.—At a meeting of the Medical officers of the Droitwich Union, held at Droitwich on the 26th of May, 1857, present—Messrs. Jaques (chairman) Rogers, Suffield, Woodward,—it was resolved unanimously:—
 "1. That this meeting feel great pleasure in acknowledging the, strenuous exertions made by Richard Griffin, Esq., on behalf of Union Medical officers, and promises him its cordial co-operation and support. 2. That this meeting cordially approves of the principles laid down in the petition about to be presented to Parliament, and pledge themselves to sign an abbreviated form of the same. 3. That a subscription of 5s. 6d. each be entered into, to assist in carrying out the objects of the Poor-law Medical Reform Association, and the amount forwarded to Mr. Griffin. 4. That a copy of their resolutions be forwarded to Mr. Griffin, and to each of the Medical journals."

ANNUAL DINNER OF ARMY MEDICAL OFFICERS.—About a hundred army medical officers dined together at the Thatched House Tavern last Saturday, Sir John Hall, K.C.B., in the chair. The visitors were the Presidents of the Colleges of Physicians and Surgeons, the Master of the Apothecaries Company, Sir John Liddell, R.N., Mr. J. R. Martin, Mr. Macgregor, son of Sir James, the late Director General, Mr. Hancock and Mr. Spencer Wells. The usual toasts were given and responded to, Dr. Smith and Sir John Hall entering pretty fully into the claims of this department upon the public and the government, and Dr. Mayo and Mr. Travers urging gentlemen present to use their influence in favour of Mr. Headlam's bill. The dinner and musical arrangements were extremely good. These annual dinners are very useful by bringing together old friends who would not otherwise meet. Last Saturday many a shake of the hand was exchanged by these who had not met for 10 or 15 years before, and that amid far distant scenes.

THE OPHTHALMOLOGICAL CONGRESS AT BRUSSELS.—It has become quite the fashion to hold congresses of all sorts at Brussels—why there, it would be very difficult to say, beyond its convenience of access. In their turn the editors of the *Annales d'Oculistique* have issued proposals for a congress of eye-doctors on the 13th, 14th, 15th, and 16th of September next; and, as eighty adherents have already sent in their names, the projectors have now issued a programme of the subjects to be discussed. Prominent among these stands the favourite Belgian one, military ophthalmia; and there are to be discussions on the ophthalmoscope, the accommodating powers of the eye, the existence of specific ophthalmias, the varieties of cataract, palpebral occlusion, and eye infirmaries. We suppose the ear-doctors or spine-men will next year marshal their forces.

THE ETHNOLOGICAL SOCIETY.—This Society held its anniversary meeting on Friday, May 29. The Council's Report announced various changes, and a considerable improvement in financial and other prospects. The following gentlemen were elected officers and council for the ensuing year:—President, Sir James Clark; Vice-Presidents, the Archbishop of Dublin, Sir Benjamin Brodie, the Hon. Mountstuart Elphinstone, Mr. Beriah Botfield, M.P.; Treasurer, Mr. Frederick Hindmarsh, F.R.G.S.; Hon. Secretary, Mr. Thomas Wright, M.A., F.S.A.; Council, Mr. W. F. Ainsworth, Mr. L. J. Beale, Mr. C. H. Bracebridge, Major-General Briggs, Mr. J. S. Coleman, Mr. J. Conolly, M.D., Mr. R. Dunn, Mr. R. N. Fowler, Mr. James Heywood, Mr. T. Hodgkin, M.D., Mr. R. Ingham, M.P., Mr. James Kennedy, Mr. D. King, M.D., Mr. Malcolm Lewin, Lieutenant-General Sir Charles Pasley, Rev. E. J. Selwyn, Messrs. J. J. Stainton, R. Tait, C. D. Tolmè, T. H. Tuke, M.D.

EXPECTED OPERATIONS.—At King's College, this day, Mr. Fergusson will perform lithotomy, and operate for the removal of necrosed bone from the femur, and for hare-lip. At St. Thomas's, on the same day, two cases of lithotomy by Mr. Le Gros Clark; excision of hip-joint by Mr. South; and removal of a tumour by Mr. Simon. On Monday at the Metropolitan Free, Mr. Hutchinson has two cases of neerosis, and a removal of the eyeball.

THE RELATIONS BETWEEN FOOD AND DISEASE.—Under the above heading a series of articles are being given in the *Medical Times and Gazette*, to which we would direct the attention of our professional brethren, as they contain much that is interesting to them at the present moment, although their application, of course, is more immediately to human pathology. It was our intention to have transferred them to our pages; but their length, and press of other matter, prevent their insertion entire, and to abridge or condense them would lessen both their force and value. We may perhaps regret that so few among us have taken up this subject, since it is a domain that especially belongs to the veterinary surgeon: nevertheless, the other branch of medicine becomes doubtlessly as much interested in it as ourselves, and the same, indeed, may be said of every member of the community; we are therefore glad to find that it has not been lost sight of. And when we add that the writer of the above-named articles asserts that he has obtained the "welcome assurance" that Professors Spooner and Simonds will lend him their assistance in bringing to light much hitherto unknown regarding the diseases of cattle,—“a consummation devoutly to be wished,”—it is clear that not only will not our profession be excluded, but we have grounds for our belief that from their united labours will result such an accumulation of facts as cannot fail to lead to the adoption of measures, cautionary and prophylactic, as will satisfy the public mind, and also prove the advantages that arise from an application of the principles of science to the prevention of the spread of disease, more particularly at the present time.—*The Veterinarian*.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting held on Monday, 1st of June, the following gentlemen were elected officers for the ensuing year:—President—Hans Irvine. Vice-President—James William Cusack. Secretary of the College—Edward Hutton. Council—Sir Philip Crampton, Alexander Read, Arthur Jacob, Thomas E. Beatty, William Hargrave, Andrew Ellis, Robert Carlisle Williams, Robert Adams, James Barker, William Colles, John H. Power, James S. Hughes, Edward Hutton, Robert Pentland, Samuel G. Wilmot, Augustus E. Tabuteau, Auly P. Banon, Peter Shannon, Rawdon Maenamara.

THE MURRAIN.—"Although as yet we are not able to give any report as having been received from Professor Simonds, we are enabled to state that he has been through Holland, Holstein, Mecklenburg, Hanover, Saxony, and Prussia, in search of the 'Rinderpest,' and *fortunately* has not met with a single case of it; and he is now gone into the interior of Poland, it being known to exist on the Prusso-Poland and Prusso-Russian frontiers."—*The Veterinarian*.

In the report made by Mr. S. Hudson, Secretary to the Royal Agricultural Society of England, at its meeting held on the 22nd ult., he says: "On the 30th of April, the professor forwarded his first communication, in which he reported that he found to a great extent that the pleuro-pneumonia had been mistaken for the severer malady of contagious typhus, and that he had to penetrate into Poland itself in order to meet with cases that might furnish evidences for his study and report. He expressed his firm opinion, that at present there was no fear of the contagious typhus being introduced into this country by means of living animals, whatever danger might arise from the importation of hides or other integumentary portions of slaughtered cattle."

NEW ELECTRO-MAGNETIC MACHINE.—Mr. Allan has had an interview with the French Emperor to exhibit an electro-magnetic machine which it is thought may prove practically useful in the application of electro-magnetism as a motive power. Hitherto no more mechanical force has been obtained by the production of electricity during the chemical change of thirty-two pounds of zinc into oxide, than by the production of heat during the combustion of six pounds of anthracite coal; so that on economical grounds steam is preferable to electricity as a motive power. We shall see what Mr. Allan can do.

SUPPLY OF WATER TO LONDON.—In last week's Return it was stated that the amount of water flowing down the rivers which supply London appears to be rapidly diminishing, as evidenced by observations on the river Lea. On the 23d inst., when the water was again measured on the weir at Stonebridge Lock, a further diminution in its depth of nearly an inch was found to have taken place in the short space of a week, and this notwithstanding the fall of .41 in. of rain which had occurred during the same period.

This interesting fact, first pointed out by Mr. Pittard, the Officer of Health for St. George-in-the-East, has doubtless a much more important bearing upon the public health than would at first sight appear. It seems highly probable that if similar observations were regularly instituted upon the amount of water flowing down the Thames, a corresponding diminution would be found to have occurred in that river also. If this supposition should prove correct, and assuming the amount of solid impurity poured into these rivers *above* the points from which the water for the supply of London is drawn by the several Water Companies to be *constant*, it follows that when the quantity of water has been thus reduced (as during the last six weeks has actually been the case) to less than *two-thirds* its previous amount, a given quantity of drinking-water must contain *one-third* more of solid impurity than it did six weeks ago. May not this circumstance have some definite relation to, and in some measure at least afford an explanation of the amount of diarrhoea which so constantly prevails in this metropolis during the summer months?—*Board of Health Return*.

POISONINGS OF THE WEEK.—On Monday, an inquest was held on the body of Emma Elizabeth Duffett, aged six months. The child was suffering from cold, and on Thursday night the parents decided to give it some laudanum. They had a bottle in the house, containing, according to the mother's evidence, only sufficient to run down the sides. Some water and sugar were mixed with this, and the dose given to the child at ten o'clock. It soon fell asleep, and at half-past five in the morning it was found that the deceased was dying. The child was taken to Mr. W. N. Price, who, however, could do nothing for it, and death ensued from the effects of the laudanum on Friday evening. The jury returned a verdict of "Died from an overdose of laudanum incautiously administered by its father." A verdict of "Chance Medley," was returned, at an inquest held on Thursday, before the Borough coroner, on the body of Edward James Smethurst, aged sixteen months, who had died at its parents' house, Circus-street, in consequence of an overdose of an opiate popularly known as "quietness," in-

cautiously administered by its mother. She has had six children, all of whom have died before attaining the age of the deceased, and she had been in the habit of giving the deceased the same medicine since its birth. In a poisoning case at Worcester, this week, it was proved that arsenic was sold from an open drawer in a druggist's shop, and kept in a cellar in an open barrel. A child has been poisoned at Bridport, by eating the leaves of the *arum maculatum*, commonly called cuckoo-pint, or "lords and ladies." It is a curious fact that the leaves and flower, or fruit of the *arum maculatum*, so frequent in our hedge-rows, and known by the several names, "lords and ladies," "cows and calves," "parson in pulpit," and "cuckoo-pint," are very poisonous, yet from the root is made the nutritious food called Portland sago.

SEA-SAWDUST.—Mr. McDonald, Assistant-Surgeon to the Surveying Ship, now in the Pacific, has sent a paper to the Royal Society, on the so-called sea-sawdust. He finds it to consist of small adherent bundles of minute filaments, with globules of air between, and states that it should be classed with the *Oscillatoride*.

BLACKBURN INFIRMARY.—The working men of Blackburn and neighbourhood have placed in Messrs. Cunliffe's bank, towards the fund for the erection and endowment of an infirmary, nearly £1,000.

POISON IN FLOUNCES.—In the last number of the *Journal de Chimie Médicale*, M. Chevallier, member of the Council of Salubrity, makes known the following fact:—"A lady had purchased at one of the large houses in Paris, for a ball dress, a quantity of green gauze, which was sent by the lady to a dressmaker to have it made up. Five of the workwomen employed on it were affected with symptoms more or less serious. In consequence of this fact, samples of the gauze were sent to be examined by M. Payen, the chemist, who discovered that the gauze was coloured by Schwenforth green, which did not adhere to the material, and was easily detached. The article in question was, it was said, highly dangerous, first, to the workmen who prepared it; next, to the shopmen who handled it when selling; and lastly, to the workwomen employed in making it up. It was also stated that if several persons were in a room together with the dresses of this material, and they rubbed against each other, arsenical dust might be raised, which would be very injurious to persons inhaling it.

OBSCENE PUBLICATIONS.—Messrs. E. and S. Davidson, surgeons, 73, West Nile-street, Glasgow, were summoned on Wednesday, at the Northern Police Court, on a charge of having allowed a man in their employment to issue to the public indecent bills on the 25th of last month in Cowcaddens-street. The parties pleaded ignorance of the law on the subject; and the fine imposed on them, seeing they were strangers, was 10s. —At the same court, John A. Lewis, surgeon, 77 Renfield-street, was brought up on a similar charge, and having been previously fined for the like offence, the full penalty of 40s. was imposed in his case. It is high time that a stop should be put to the practices of these *surgeons*.

A CHARITABLE BANKER.—M. Perrenoud, a Swiss banker, who has just died at La Sagne, in the canton of Neuchâtel, at the age of 82, has left 100,000f. for the construction of an hospital, and 47,500f. to other charitable establishments in that town.

PROSECUTION FOR THE ILLEGAL PRACTICE OF MEDICINE.—A person by the name of John Collins, residing at Yapton, a village situated between Arundel and Bognor, in Sussex, was prosecuted in the Arundel County Court on the 9th inst., at the instance of the Chichester Medical Protection Society, in the name of the Apothecaries' Company, for practising medicine without a diploma. The defendant, (who is in possession of no medical or surgical qualification whatever, but, with great assurance, has been practising in the above village and its neighbourhood for several years,) by the advice of his solicitor paid the penalty and costs, (amounting together to upwards of £30,) immediately on the summons being served upon him, and thus prevented the proceedings from coming before the Court in the usual manner.

LEAD POISONING.—Dr. Thomson, in his last monthly report on the health of St. Marylebone, says:—"One case of softening of the brain is reported to have been produced by absorption of lead into the system in consequence of the occupation of the patient. It is to be desired that white lead should be dispensed with as a pigment, if zinc white, which is harm-

less, can be made as effective, since a considerable number of persons die in this parish, at a comparatively early age, from palsy induced by poisoning by lead in the prosecution of their occupation as painters.

GENEROSITY OF M. CIVIALE.—Since 1829 there has existed at the *Hôpital Necker* a special department for the treatment of affections of the genito-urinary organs; and this has been now directed by M. Civiale gratuitously for nearly 30 years. Having good reason to fear that on his approaching retirement, for financial and other reasons, these beds would be given up, he has made over a sufficient sum of money to the hospital administration to secure their perpetual continuance, his successor receiving 1500 francs per annum. In this way he hopes the improvements in lithotomy he has introduced may be continued by those who are to follow him; while a place for the succour of the indigent afflicted with this painful class of complaints, and for the instruction of young surgeons in the best means of relieving them, will be perpetuated.

THE MURRAIN.—The *Times* Correspondent, writing from Berlin, May 23, says, that “no case of murrain has as yet shown itself in the Baltic provinces of Prussia during the present visitation; the disease exhibited itself in the Russian towns on the Prussian frontier, but was prevented from entering by the very strict sanitary measures observed by the local authorities. In Oppeln, in Silesia, the only place where the disease contrived to enter, there have been altogether 138 head of cattle killed on this account, but of these a very small number indeed was known to be infected. The various military cordons that had been drawn round several suspected places in Silesia, on the Polish frontier, are being now sent home. On the Prusso-Austrian frontier, however, all the precautionary measures are being kept up still, as the disease is known not to be by any means extinct in Austrian Gallicia.”

LONDON AND PARISIAN HOSPITALS.—From an interesting report of the Committee of Beneficent Institutions, of the Statistical Society, it appears that London and Paris present a striking contrast in the methods which they adopt for affording relief to the sick poor. In London a great part of our medical relief is dispensed at the houses of the poor themselves by the physicians and surgeons attached to our dispensaries. In Paris, on the contrary, comparatively little relief is afforded otherwise than in the hospitals themselves. Thus, in the year 1853, the number of in-patients in hospitals in Paris amounted to no less than 91,754, against only 45,808 in hospitals in London; this calculation, in the case of London, being exclusive of patients treated in workhouse infirmaries. But, on the other hand, under the system of out-door medical relief recently set on foot in Paris, 102,472 persons received gratuitous attendance, against upwards of 600,000 patients similarly relieved in London. The nearest approach to a fair comparison between London and Paris which it seems possible to make is that afforded by a statement of the sums contributed by the medical charities and the poor-rate taken together, as follows:—In London, income of medical charities and poor relief, £1,150,900; in Paris, expenses of l'Administration Générale, £560,853.

THE SARAWAK TRAGEDY.—The following paragraph has appeared in several papers:—“It may not be generally known that the Right Rev. Dr. M'Dougal, Bishop of Borneo, under whose skilful treatment Mrs. Crookshank, one of the victims of the insurrection, was, by the last advices, doing so well, was admitted a member of the Royal College of Surgeons of England on the 3rd of June, 1839, and on the recommendation of some of the most celebrated Surgeons the council conferred on this distinguished prelate the fellowship of the College on the 25th July, 1854.”

AN AMERICAN CENTENARIAN.—There is now living in Murray county, Georgia, on the waters of Holly Creek, a Revolutionary veteran who has attained the age of 134. His name is John Hames. He is known throughout the region in which he lives by the appellation, “Gran’sir Hames.” Gran’sir is contracted for Grandsire. A grandsire he truly is. As I was on my way to visit this relic of the expired 18th century, I inquired of an oldish gentleman of about 60 if he knew him. “Oh yes, I know him,” said he, “he is my grandfather!” John Hames was born in Meeklenburg county,

Virginia, and was a lad 10 years old when Washington was in his cradle. He was 32 when Braddock met his defeat in the Monongahela. He and several of his neighbours set forth to join the headstrong and ill-fated commander, but after several days’ march were turned back by the news of his overthrow. He migrated to South Carolina nearly 100 years ago. He was in 13 considerable conflicts during the War of Independence, and in skirmishes, rencontres with Indians, with Tories, and with the British, times beyond memory. He was with Gates at Camden, with Morgan at the Cowpens, with Greene at Hillsboro’ and Eutaw, and with Marion in many a bold rush into a Tory camp or redecoat quarters.—*Cassville Standard*.

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 30, 1857.

BIRTHS.

Births of Boys, 846; Girls, 856; Total, 1702.
Average of 10 corresponding weeks, 1847-56, 1436.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	444	471	915
Average of the ten years 1847-56 ... ..	...	...	972
Average corrected to increased population ... ..	...	...	1069
Corrected average for corresponding week in ten years 1847-56	493.3	478.2	971.5
Deaths of people above 90 ... ..	...	...	6
Deaths in 13 General Hospitals	20	21	41

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29.597 in.
Mean temperature	56.9
Highest point of thermometer	74.0
Lowest point of thermometer	42.9
Mean dew-point temperature	48.2
General direction of wind	Variable.
Whole amount of rain in the week	0.12
Amount of horizontal movement of air in the week	530 miles.

DEATHS REGISTERED DURING THE WEEK.

CAUSES OF DEATH.	In the Week ending Saturday, May 30, 1857.						Averages of Temperature and Deaths in 10 Weeks.
	Deaths of Persons.						
	AT ALL AGES.	Under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.	At 80 Years of Age and Upwards.	
Mean Temperature	56.9						55.8
ALL CAUSES	915	457	110	150	149	44	971.5
SPECIFIED CAUSES	908	456	109	150	149	44	962.0
DISEASES:—							
1. Zymotic Class	181	144	7	12	18	..	221.4
2. Dropsy, Cancer, and others of uncertain seat	46	8	7	14	14	3	41.6
3. Tubercular Class	183	83	54	43	3	..	189.4
4. Of Brain, Nerves, etc.	118	53	9	22	27	7	118.1
5. Of Heart, etc.	36	7	6	11	11	1	40.8
6. Of Respiratory Organs	139	80	11	16	30	2	136.1
7. Of Digestive Organs	53	16	7	17	11	2	59.7
8. Of Kidneys, etc.	11	..	4	6	1	..	12.5
9. Of Uterus; viz.—Puer- peral Disease, etc.	4	..	2	1	1	..	6.9
10. Of Joints, Bones; viz.— Rheumatism, etc.	6	2	..	1	1	2	8.5
11. Of Skin, etc. .. ..	..	..	..	..	..	..	2.5
12. Malformations	4	4	..	..	..	..	4.1
13. Debility from Premature Birth, etc.	35	33	..	2	..	..	26.6
14. Atrophy	24	14	..	2	8	..	25.6
15. Age	44	..	..	..	18	26	37.5
16. Sudden	4	2	..	..	2	..	6.2
17. Violence, Privation, etc.	20	10	2	3	4	1	24.5
CAUSES NOT SPECIFIED	7	1	1	..	..	..	9.5

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population. 1851.	Small-pox.	Measles.	Scarlatina.	Whooping-Cough.	Dysentery.	Typhus.
West	376,427	..	..	4	5	1	7
North....	490,396	1	5	4	13	8	12
Central ..	393,256	..	8	1	16	..	2
East	485,522	..	6	2	17	2	6
South	616,635	..	5	5	20	6	3
Total..	2,362,236	1	24	16	71	17	30

BOOKS RECEIVED.

- Experience of a Civilian in Eastern Military Hospitals. By P. Pincoffs, M.D. London. 1857.
- On Cancer and its Treatment. By J. Weldon Fell, M.D. London. 1857.
- The Beautiful Islets of Britaine. By W. C. Dendy. London. 1857.
- The English Bread Book. By Eliza Acton. London. 1857.
- Indigestion, Rheumatism, Gout, &c. By W. Brett, M.R.C.S. London. 1857.
- Collegiate Education. London. 1857.
- Report of the Sanitary Condition of St. Mary's, Islington, for the year 1856. By E. Ballard, M.D. London. 1857.

TO CORRESPONDENTS.

Dr. Cotton's case shall appear as soon as possible.

Mr. W. Nicholas should refer to our last Student's Number, where he will find all the information he requires. An advertisement in this Journal would in all probability lead to his obtaining his wish.

COLOUR OF EPILEPTIC MICE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Is there not some mistake in your report of Dr. Snow's observation at the Medical and Chirurgical Society of May 12? You make him say, "That white mice turned blue and livid before the fit commenced." I know well enough that *blue-hares* turn white in the winter, but this sudden change of dress in mice seems rather strange to me.

I am, &c. A NATURALIST, F.L.S., AND SUBSCRIBER.

[Dr. Snow's observation referred to the skin, and not to the hair. The observation itself is interesting as bearing on that view of epilepsy which connects it with venous congestion. The delicate skin of the white mouse is well adapted for showing changes in the circulation. The little creature becomes of a vermilion tint when breathing oxygen gas.—ED.]

A Nurse.—There is very little efficacy in the employment of camphor and other similar substances in preventing the contagion of fevers. The best prophylactics are general cleanliness, plenty of fresh air and water, moderately good living, and cheerfulness of mind. Chloride of lime is undoubtedly beneficial in neutralising bad smells, and is especially antagonistic of the vapours of sulphuretted hydrogen; but its power of destroying infection is more than doubtful.

P. Q.—Impotence and Spermatorrhoea are the bugbears by which many weak and nervous young men are frightened, but which have often no existence except in the imagination of the patient. Apply to some respectable Practitioner, and follow carefully his advice; but by all means avoid the whole tribe of advertising quacks.

Chirurgus.—We are quite unable to determine whether the employment of the speculum was or was not required in the case described; but, generally speaking, if a woman complain of uterine symptoms which do not yield to general and ordinary local treatment, we conceive that a physical exploration of the parts is not only justifiable but necessary for a proper understanding of the disease.

A Young Student.—The term *isomorphism* implies similarity of atomic constitution, with similarity or identity of crystalline form: thus the sulphates of zinc, iron, and magnesia are isomorphous with one another; but *isomerism* implies similarity of elementary composition, with *dissimilarity* of atomic constitution and of crystalline form: thus, cyanic acid, fulminic acid, and cyanuric acid are all composed alike of cyanogen and oxygen; but their atomic arrangement and chemical and physical characters are otherwise quite different.

Erratum.—In our pass-list of the College of Surgeons last week, Charles James Fluder was printed, instead of Charles John. Such errors might prove of importance, and show that the College should do as all other Medical licensing bodies do, namely, send correct pass-lists to the Medical journals. If they do not, they may find all the journals refusing to insert their pass-lists, except as advertisements.

Dr. O'Leary's letter was received too late for insertion this week. The subject shall receive due attention.

Mr. Henderson.—Yes. Mr. Toines's Lectures have been published separately.

Mr. Long's case of Unexpected Pregnancy shall appear next week.

A Pharmaceutical Chemist.—There appears no intention to do injustice to the Pharmaceutical Chemists by the Sale of Poisons Bill. But there are a hundred people in the country who sell arsenic and laudanum without the least care, for one Pharmaceutical Chemist, and as long as such people are allowed to sell poisons, there must be some stroug restrictions.

DR. FELL'S GREAT SECRET.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In the *Medical Times and Gazette* as far back as February 14, 1857, I published the following Note:—

"No. 189.—CANCER CURING.

In your Journal of last week you advert to the method adopted by Professor Simpson to enucleate tumours; viz., by puncturing them, and injecting into these punctures solutions of caustic. Now, I do not think it would be unworthy of trial by Surgeons, to see what would be the effect of carrying out this method on a larger and more perfect scale. Thus: remove the epidermis over the tumour by a blister or otherwise; cover the denuded surface with a layer of the sulphate (or chloride) of zinc paste, and at the same time (or after the lapse of a day or so,) score the tumour deeply by incisions with a bistoury, filling these incisions with the sulphate (or chloride) of zinc paste. It appears to me the inevitable consequence would be, that the tumour would slough out as a whole—would 'enucleate' itself. "I am, &c. "CHIRURGICUS."

In this note is contained Dr. Fell's "secret" remedy—the chloride of zinc, which cannot but strike the Profession as a most valuable and novel discovery.

Dr. Fell's formula is,

R Sanguinariae Canadensis, ʒss. vel ʒi.

Chlor. zinci, ʒss. vel ʒii.

Aquæ, ʒii.

Puly. Sem. tritic. Hibern., q. s.

I am sure I am but expressing the feeling of the Profession at large, when I say we are exceedingly obliged to Dr. Fell for informing us that the essential ingredient in his caustic is not the chloride of zinc, but the colouring matter, the Sanguinaria Canadensis. But for that information we certainly might have been led to a different opinion.

I am, &c.

J. ZACHARIAH LAURENCE.

30, Devonshire-street, Portland-place, June 3, 1857.

COMMUNICATIONS have been received from—

Sir JOHN FORBES; Dr. ROBERT LEE; Dr. FENWICK; Dr. WEBSTER; Dr. SNOW; Dr. KIRKES; Professor HUXLEY; Mr. COOPER FORSTER; Mr. JABEZ HOGG; Mr. BURFORD NORMAN; Dr. COTTON; Mr. YEARSLEY; Mr. SHARPIN, Bedford; Mr. CROSSE, Norwich; Captain HARRISS; Dr. MCWILLIAM; Mr. R. LEWIS; Mr. J. SHAW; Mr. WHEATLEY; Mr. STACEY; Mr. WILSON; Dr. MORRIS; Mr. SUFFIELD; Mr. REED; Dr. BROSTER; Miss CHATTERTON; Dr. FLUDER; Mr. BROWNING; SECRETARY-GENERAL BOARD OF HEALTH; Mr. RAWES; Mr. RAMSAY; Mr. VIVIAN; Dr. RYAN; Mr. G. M. DICKINSON; Mr. SUMNERS; Mr. MAY; Dr. S. LAIRD; Mr. H. GREENWOOD; Dr. BISHOP; Mr. LONG, Liverpool; Mr. HENDERSON; Dr. O'LEARY; Mr. Z. LAURENCE; A PHARMACEUTICAL CHEMIST.

APPOINTMENTS FOR THE WEEK.

6. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing Cross, 1 p.m.

ROYAL INSTITUTION, 3 p.m.: Professor E. Frankland, "On the Relations of Chemistry to Graphic and Plastic Art."

8. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.; Orthopædic Hospital, 3 p.m.

9. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Ballot, 7½ p.m.; Meeting, 8½ p.m. Dr. Aitken, "On the Effects of the Residence in Bulgaria, in 1854, on the Crimean Troops;" Mr. Henry Thompson, "On Concretions of the Prostate;" Dr. Haudfield Jones, "On recent Aguish Disorder in London."

ZOOLOGICAL SOCIETY, 9 p.m.

ROYAL INSTITUTION, 3 p.m.: J. P. Lacaita, LL.D., "On Italian Literature—the Areadia; Parini; Alfieri; Leopardi."

10. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 3 p.m.

NORTH LONDON MEDICAL SOCIETY, 8 p.m.

MICROSCOPICAL SOCIETY, 8 p.m.

ETHNOLOGICAL SOCIETY, 8½ p.m.

ROYAL SOCIETY OF LITERATURE, 4½ p.m.

11. Thursday.

Operations at St. George's, 1 p.m.; Middlesex, 12½ p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.

ROYAL INSTITUTION, 3 p.m.: Professor J. Tyndall, "On Sound, and some associated Phenomena."

12. Friday.

Operations at the Moorfields Ophthalmic, 10 a.m.; Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8½ p.m.: Professor Faraday, D.C.L., "On the Relations of Gold to Light." Close of the season.

ORIGINAL LECTURES.

THE MORAL ASPECT OF THE
MEDICAL ART.AN ADDRESS DELIVERED AT THE DISTRIBUTION
OF PRIZES

AT

St. Mary's Hospital Medical School;

WEDNESDAY, MAY 20, 1857.

By Sir JAMES KAY SHUTTLEWORTH, Bart.

(Continued from page 559.)

WHEN we reflect in what scenes and under what responsibilities this act has to be exercised, the motive for aiming at a high standard of moral, as well as of intellectual excellence, will be more apparent.

There are, for example, the great events of war—such as have recently been brought with unusual skill before the popular apprehension. The carnage of battle fields, the fevers of the Delta, the accumulating casualties of the siege, the bivouac, the winter's night watch, scanty and improper food, insufficient clothing, want of shelter, fatigue, watching, contagion, all tending to fill vast Hospitals with a disabled army. We know that such scenes are not be dealt with in the spirit of routine; hence the need of the highest science. But there is in such crises even a greater strain on the moral strength. There ought to be everything in the previous training of the student to implant a spirit of heroism.

Nor is it in scenes which thus stir the depths of intelligence and character, and sometimes awaken a latent force not till then suspected, that the moral nerve of the Physician is tried. Let us conceive him to be placed in a region like some of the Alpine valleys, where natural causes co-operate with local habits and customs, to produce a marked degeneracy in the race. He is surrounded by stunted, sallow, bloated forms, sinking in hebetude, goitred, deformed, with clouded minds, or even idiots or insane. His clients would for the most part be the suffering poor, from whom he could hope for neither honour nor reward. His researches would constantly bring him in contact with the most loathsome forms of humanity, take him into foul hovels, in malarious swamps, and into disgusting asylums of helpless eretism. Years of patient observation, a careful record of facts collected from a wide area, and a scientific analysis and comparison of these results of a life of experience, may be required before the faithful Physician may be able to grasp the clue in this labyrinth of thought, enabling him to reach the truth on which to plan a method of life to prevent, or a mode of treatment to cure such disease. Through a life so spent he needs to be supported by a love of science, by a deep sympathy for suffering humanity, and by a preference of a pure conscience above honour and reward.

The life of Jenner, spent in the researches by which he discovered the most remarkable law yet known in the etiology of diseases, and enabled us to limit the ravages of the plague of small-pox, is an example of this form of devotion.

The art of medicine has always had men ready for these, and the more dangerous tasks of watching the course of epidemic contagious maladies. Physicians have not shrunk from their posts of peril in the worst plagues which have ever visited the great cities of Europe. The love of scientific truth alone may enable the great Physician to prepare himself to watch the approaches of such a malady as the Asiatic cholera, or yellow fever. He notes with accuracy the facts of its first appearance; he traces its diffusion; he ascertains the circumstances promoting its propagation, and if possible whence the seed of the mischief is scattered. Such researches lead him personally to the homes of the poor at all hours of the day and night, amid scenes of misery, want, filth and vice, among the foulest haunts of the most degraded. Perhaps in a single night he sees some loathsome lodging-house filled with the dead and dying by a sudden outbreak of the epidemic; or a street of prostitutes and thieves made one great hospital or charnel-house. Thus, under his eye, the population is smitten, day by day, by an unseen and pitiless influence, and perishes as immature blooms or fruits fall in a night of frost.

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In its highest point of elevation, this love of scientific truth is a motive so pure and strong, that it partakes of the quality of the highest moral impulses. Science has its heroes and martyrs. Yet there must be an awful want in the philosophy of that man, however lofty his intellect, who could witness the destructive force of an epidemic develop and waste itself at the sacrifice of many thousands of the inhabitants of a great city, exactly in the same spirit as he would observe a swarm of ephemera die in a cold gust of wind, or some molecular change induced by heat, electricity, or chemical affinity. To the strength of the scientific love of truth, I would add that zeal for suffering humanity, whose deepest and fullest source is a conviction of their immortality and responsibility.

A general at the head of an army, disposing the destiny of thousands of lives by a word, and a Physician witnessing the devastation of a province by an epidemic, with the conviction that the whole phenomenon might be arrested, if the law of its propagation were disclosed to him, as to Jenner, are both tempted to look on man as an ephemeron without a future. Indeed, with a distinct consciousness of the destiny of man, war would seem scarcely possible. But the thought which would paralyse the warrior is exactly that which might give an almost superhuman strength to a Physician.

I have said that the training of a Physician from his earliest studies, in the midst of the mass of the suffering poor, implants the instinct that man, in whatever degradation, is his client, at whose slightest claim his highest skill is ever ready. After years of study and observation, and more than half a life spent in the exercise of his art, perhaps it may be his lot to watch in palaces over the birth of infants, whose earliest cry is an event in history, and to tend the infirmities and decay of men whose will has governed navies and camps, and held empires together. Behind the fair pageant of life, the Physician passes like a shadow. He discerns the first inroads of the disorder, unknown to its victim, which limits the career of the statesman, the philanthropist, or social philosopher. He sees the penalty which luxury pays in pain and hereditary disease—the noblest inheritances dissipated, and the proudest names dishonoured by some distemper in the blood. Families whose names have held the highest place in English history, degenerate by some taint or flaw; and sacrificing happiness, fortune and fame to vanity, or sensuality, or stupid pride.

Then he observes the "wear and tear" of our social life. He sees the strain of struggles in the learned professions, first for the means of living, then for a provision for a family; and to the gifted, for wealth, fame and power. He has to watch the merchant's tension of mind in those great speculations of our commerce which now encircle the earth.

Here is a great contrast to the man who began his career in the hovels of the poor, and who commonly still spends a part every day in the wards of Hospitals. Though there is no fee to stop the pulse of time, yet wealth is ready with any bribe for a respite, and riches are within the reach of the successful Physician.

At this stage, he encounters the danger that he should forget the example of John Hunter, whose devotion to science grew with his success; and that he should thus become a mere lacquey of the wealthy and the great, and a hunter of fees.

There are two safeguards from this degradation,—the love of science, and a higher philosophy, which raises the Physician above the capricious fashions of the upper ranks of civilization, and makes him, to the highest as well as to the humblest, the witness of those laws of the moral and physical being to which all alike are subject.

The cost of living in our artificial society itself causes demands on the exertions of the Physician which have an imperious tendency. Besides the mere competition, the house-room, and the cost of provisions in a great city, the growth of luxury creates wants, and custom intrudes with fantastic demands tending to make the man of science and genius the slave of his station in society. The sweat of his brain ought to be spent for something better than merely to live in a fashionable square, to dress his family in the newest gauds, and enable them to appear in all places of public resort. May I, without presumption, counsel a greater simplicity of life to those whom I would fain look upon as among the witnesses and guides of their time? The man whose mind has been expanded by the education and career of a Physician should also, in this respect, rise above the follies of

his age. He needs time for reading, observation, reflection, and knows that solitude is the nurse of genius.

It was the custom of the Eastern seers to cherish in the desert insight into that truth which they returned to utter in the courts of kings. In our time we have had Dalton, and Faraday, and Owen living in studious simplicity, for high science, even in the throng of the busiest cities, untempted by the wealth or the homage of society from the seclusion necessary to their noble pursuits; so, also, the Physician does well to make his daily visit to the wards of his Hospital, and to the houses of the poor, to take his place as an inquirer and teacher in the Medical School, and to spend some hours in secluded study, resisting every effort to shut out such pursuits, and to waste his time and faculties in hurrying from street to street, in hot haste, to satisfy the mere caprices of wealth and fashion.

A Physician whose scientific ardour is thus daily fed with fresh oil will carry the spirit of research with him into that other school of nature—this great city, whose energies govern and civilize half the world, which pours its tribute of wealth at its feet.

To one who has attained and preserved this elevation of mind, his daily visits to the chambers of wealth and luxury will also afford golden opportunities of study. Such works as those of Dr. Abercrombie, Sir Henry Holland, and Sir Benjamin Brodie, are proofs of the harvest of observation and reflection which a Physician may thus glean, as is also Sir James Clark's work on Climate, in another sphere of inquiry. Before such men, this city is but a greater Hospital. One ward is tapestried with silk and carpeted with velvet; another is a scene of squalor and rags; and a third is haunted by the laugh and scream of *dementia*. But, under their eye, is still the same subject of study—man. The follies, passions, and vices of the age have, in their calm intelligence, to be regarded from a point so raised above the transient turmoil that they might almost be suspected of cynicism, when the tranquil habits of their thought alone are observed. But such men have not risen to the full stature of great Physicians, if they have stifled the sympathy of man for his fellow-man. Not even the loftiest human intelligence has the right to arrogate to itself the attitude of a spirit pure from all the frailties of humanity, having no lot in its casualties, and no partnership in its destiny. No man may stand and witness the errors, sufferings, and ruin of his fellow-man unmoved. But I could conceive that the spirit of a material philosophy should have so invaded the mind even of a learned Physician, that he should have become hopeless of the lot of humanity. The progress of society in its moral aspects, from century to century, is so slow, that, notwithstanding all the triumphs of physical science in increasing the comforts and conveniences of life, I can conceive that such a man may say, that history reproduces the same features, modified only by the influence of race, civilization, and national condition, but with only the same average moral character. He may not assert, with Rousseau, that man is degenerate from a condition of savage virtue; but he may, with Voltaire, deny him the power to rise above his present moral state.

A Physician who has imbibed such a philosophy must either be callous to human errors and suffering, or must himself be the hopeless centre of misery. Such a conviction is only another form of that materialism which denies a future to man—it denies a better future to the race.

The Physician who, like Humboldt and Prichard, enlarges his scientific comprehension, so as to include the several tribes of man, is enabled to see how even purely physical causes must co-operate in the growth of civilization, and with it of virtue.

By the reclamation of jungles and swamps, the irrigation of arid wastes, the increase of the means of subsistence, the diminution of coarse and degrading labour, the growth of science, and the improvements of the arts of life, the increased intercourse of men, the interchange of commodities and ideas, and the admixture of races, tribes of men have been gradually elevated physically and morally; even famine, pestilence, and war, tend to extirpate the feeble races, and leave only those which have vigour to survive such casualties.

The laws which govern the dispersion of the predominant races are, however, not purely physical. Wherever the Roman came, he introduced "*virtus*," the sense of obedience to the law; a valor for the State, lending to self-sacrifice, order, that the power of Rome might be supreme. He conquered and ruled by this moral power. Wherever the Anglo-

Saxon appears, he brings a love of truth, liberty, and self-government, which enable him to conduct the enterprise of the world. He conquers by the sword, but he subdues and assimilates by commerce; in the train of which follow material civilization, and at length Christianity. He rules because he speaks the truth, trusts, and can obey; but also because he is free and enterprising, and gives the impulse of liberty and commerce to the world.

Moreover, the races in which the highest physical organization has been developed present also the types of the greatest intellectual and moral force. The law of development is, that these nobler races gradually expel other types, or, in some happy instances, by the mingling of hardy races create a new and more vigorous type; and thus by the action and reaction of a chain of physical and moral causation the Physician sees the growth of the whole species in vigour and virtue.

That which we can trace of the migration, settlement, and history of nations, whether in their language, monuments, records, or traditions, gives also proof of progress, from a condition physically more coarse, socially more governed by brute force, and intellectually immeasurably lower than the present.

The same law of progress is to be traced in the history of many European nations, and especially in that of our own country. Here all the foregoing causes have combined to bring about the result. We have had a mingling of the blood of the Roman, Saxon, Dane, and Norman, in which the greatest hardihood, the sternest valour, the most restless activity, have been tempered by the Saxon strength and perseverance. We have partaken of the successive influences of the introduction of Christianity, the revival of ancient learning, the invention of printing, the growth of civic and national freedom, and the recent marvellous progress of the exact sciences. Can it be denied that the England of Victoria has made progress from the condition of the England of Alfred?

If our peasantry and artisans are still unlettered and rude, if we have much vice, crime, and pauperism, as a mass, their physical condition and the moral state of the upper ranks of workmen are improved. Apart, then, from the highest moral considerations, the Physician ought to put his foot on the head of the serpent which would tell him to despair of the future of mankind. Every example of the highest moral excellence is not like the genius of Newton, to be regarded as a phenomenon rather to excite awe than hope. Even the wonderful intellect of such a man shows us the grasp of the human mind.

But we have been taught, by a higher philosophy and example, that moral excellence is a thing apart from intellectual power, as it is from wealth and station. If we cannot hope that the intellectual power of the race should be raised to the level of that of Newton, there is no meaning in the mission and example of Christ, if it be not designed to relieve us from despair as to the moral destiny of our species. He lived and died in vain if it is vain for the race to strive to live after that example. Revelation is a fable, if it reveal a future destiny to each man, but leave us hopeless that the race itself can rise from its grave of barbarism, sensuality, and materialism.

This would not be the time or place to grapple with such speculations, if the most urgent want of the age were not, that every energy should be bent to the task of bettering the condition of the great mass of the population of Europe. Every century brings its peculiar crises. In this, Napoleon, embodying the impulse and power of the French revolution, has destroyed the feudal institutions of Europe. The change was too vast, sudden, and revolutionary for the establishment of liberty. That which has survived the destructive hurricane of war is social equality. But this equality before the law has not solved the problem of a more equal diffusion of the means of subsistence. Security for life is perhaps gained, but penury and want still gnaw the masses of Europe. Socialism there universally threatens all existing institutions with ruin.

In this country changes are brought about gradually. After a quarter of a century we look back and find that we have taken one step in a revolution. We do not pass through the critical convulsions which suddenly transform the institutions of our neighbours. We have preferred liberty to equality, and we have succeeded in making that liberty a means of bettering the condition of the poor. Life is secure, property is safe, and the people improve. But we ought not to shut our eyes to the fact that the rapid development of the exact

sciences; the command which this has given us over the natural forces; the consequent vast extension of our commerce, and with it of our national wealth and power, have given an impulse to luxury, increasing the distance which separates the indigent from the wealthy, and the contrast of their social states. While riches and luxury accumulate, democratic power spreads, and pauperism and crime are problems yet unsolved. Tranquillity has been exactly proportionate to the conviction which the people have had that they were cared for by the legislature and protected by the law.

As respects the condition of the mass of the people, the Physician is in a position to be a most important witness, and he is not at liberty to be indifferent. Therefore it is that I would inspire him with faith in the destiny of his fellow-men. These men, worn by toil, wasted by want, corrupted by vice, are not mere fuel for epidemics. The energy of the race has made them successful colonists in every quarter of the globe, and, in every one of these suffering men might be developed a power and worth yet unknown.

We have had in this country such Physicians as Sydenham, Harvey, Heberden, and Hunter. Such men are the interpreters to their time of such historic events as the invasion of epidemics. Living Physicians have warned the public where lay the fuel of the epidemic cholera, by what municipal and social evils its virulence was promoted, and by what measures they might be removed. Under their guidance in the last twenty-five years, since this epidemic reached us, our great towns have commenced the improvement of their water-supply, markets, sanitary police, and of the houses and lodgings of the poor. The limitation on the hours of labour for women and children in certain employments is a recent feature of discussion and legislation.

The condition of workmen in mines, factories, in agricultural occupations, and trades noxious to health or dangerous to life, have been examined, and in these inquiries our Profession has been faithful in all its true representatives to the interests of humanity. In this path of improvement many problems await the research of faithful witnesses. We are solving with slow but steady progress the questions of national education, of reformatory discipline in gaols, and several allied questions; and, among them, the foul stain of intemperance, the evidence of which is an annual expenditure of £60,000,000 on beer, spirits, and tobacco.

That which is most affecting and hopeful is the effort which the people make, by their temperance societies, their pledges, and their outcries for the Maine liquor law, to remove this cause of poverty and discord from their families, and this obstacle to the elevation of their class from self-imposed misery and degradation. No Physician is at liberty to be indifferent to the removal of the most prolific source of disease, insanity, and crime.

Another frightful social evil lies so peculiarly under the eye of the Physician, that its causes and the means of prevention seem to be a study laid by circumstances on our Profession,—I allude to *prostitution*. We are all familiar, from works of foreign medicine, with the sanitary police adopted abroad, to mitigate this plague as a source of danger to the public health. The mischief of such a police is, that it unavoidably transforms a social corruption into an institution. We are not at liberty to pay *black mail* to thieves, or simply to regulate *petty larceny*; but even the police might do much to prevent, and the law to punish, the kidnapping of inexperienced girls—to suppress infamous houses, in which the arts of seduction are practised—to root out brothels, and prevent the lures of public sensuality from becoming a snare for the young, and its indecencies from shocking the modest. But by mere repression new forms of evil are created. The whole subject should be examined from its source in the homes, domestic habits, education, and employment of women. It has a separate source in every one of these. That Physician would deserve well of his country who would not shrink from contact with this loathsome evil, in order that he might describe the disease and point out its cure.

While we thus insist on the right moral direction of the aims of the Physician, let us not forget the power which science and erudition have to purify from low ambition, or the need there is for such a man throughout his life to refresh his spirit at the fountain-head of classical wisdom, and to keep the mind well braced by the air of high philosophy.

In the midst of early cares and struggles we gather strength from the habit of intercourse with the master spirits of former

times. "They were no fools, I find, those ancients," said a man to me, who, when prostrate with nervous exhaustion after an arduous professional career, had cheered his retirement and reanimated his powers by renewing such studies. The Physician who carries with him his Greek or Latin classic in his daily round of visits, and lays it down on the seat of his carriage before he enters the chamber of his patient, will come in the true dignity of his Profession, with a mind serene amidst petty jealousies, and unruffled by the unworthy practices of those who make a trade of their art. The Physician whose mind is constantly fixed on that correlation of the sciences, in which lies his chief hope of perfecting the art of medicine, will be exact in observation, scrupulously accurate in his record of facts. He will patiently await the disclosure of Nature's secrets. Through years of painful investigation he will toil, till he has reached the lode of truth, which alone can reward his efforts. To such a man the literature which has no meaning, except as an advertisement of its author's need and ignorance, can only operate as a warning. He will only lay before the world the results of his labours when the publication of discoveries, the revival of disused methods of cure, or the invention of other expedients suggested by the progress of science render the disclosure of his views a duty from which he ought not to shrink.

The opinions given by such a man to his patients will be simple, direct, and solely guided by science and experience. While his mind is open to receive the proofs of any improvement in his art, he will not easily be deluded by any of those pseudo-scientific innovations which every age produces. Such quackeries are for the most part the exaggeration of some truth, that single grain which he will search out and separate from its matrix of error.

Then, as respects his personal relations. No disguise of self-deception, fraud, morbid simulation, or insane fancy, will be likely long to escape the piercing insight of his experience. No blandishment of the wealthy or great will induce him to swerve from the straight path of duty, either to gloss over an infirmity, or to impute it where it does not clearly exist,—to pamper a caprice which ought to be suppressed, but the indulgence of which enervates or ruins. No one, of whatever rank, will seek such a man, hoping to obtain at his hands the palliation of some vicious or sensual course fatal to health or life. Nor will he shrink from the statement of a clearly discerned truth, though fortune, fame, or life might be saved by the hiding of what it may be an unquestionable duty to declare. Much less will he permit his science and skill to be purchased, to defend against his convictions any offender against the law. All will expect him to be a calm, simple, faithful interpreter of Nature, whose voice will be heard through him.

He will never enter into any family feud, to make his authority wait upon morbid fancies and fears, much less upon guile or hatred. He will never practise on the apprehensions of the sick or their friends, and prolong a course of medication, in which health, life, and domestic happiness are less considered than his own advantage. He will not seek to form any other alliance among his brethren than that of mutual respect and confidence, and will avoid every temptation to be mixed up with some school or cabal on any less legitimate basis.

With simplicity of habits, his wants will be few, and he will be ready at any time to live the life of a secluded scholar or man of science, if the ordinary path of his Profession be closed to him, or to enter on any work of administration strictly in harmony with the objects of his career. Thus the Profession of medicine has given to every branch of scientific inquiry some of their most successful students. I need scarcely now mention the names of Physicians who, in this century, have illustrated the sciences of natural history, zoology, botany, ethnology, comparative anatomy, palæontology, geology, chemistry, meteorology, and whose works are of the highest authority in each. They will be found in the first rank of observers and interpreters of nature.

The revival of letters created a republic of learning in Europe, of which Latin was the common language, and in which distinctions were awarded independently of camps and courts, and an authority, in such men as Erasmus, acknowledged almost without appeal. The progress of all science was greatly promoted by the intercourse thus established among the greatest thinkers in every age. Thus we find Leibnitz and Newton in correspondence. The growth of the

exact sciences has strengthened the organization of this republic of learning, as a means of diffusing every discovery with the utmost rapidity,—of trying every new theory before a court composed of every great inquirer, and of securing to genius a reward in the homage of all who cultivate science throughout the world. No one can dethrone from their great elevation the chiefs of philosophy. The Physician, in his studies, travels, and investigations, is a member of this republic of learning, and he does well never to be indifferent to the rank which he holds in it.

Nor is any profession so well prepared to foster all those institutions by which we may hope to spread a knowledge of natural science, especially among the middle classes. The growth of provincial colleges, public libraries, botanical gardens, museums of science and art, and of societies promoting habits of local observation and research, is an object strictly within the sphere in which a learned Physician may hope beneficially to influence the city in which he lives. I have already said how usefully to himself and others he may lecture and demonstrate in some Medical school. In short, the life of a Physician, though it may be without the reward of wealth or honor, cannot, if he be true to science and to his art, be spent in vain. Scarcely any career affords such frequent opportunity to assuage pain, to relieve physical and mental anguish; almost to restore to life those for whom the grave seemed to gape. No art has such wide relations with all science, or affords, therefore, so many regions of research. None renders its professor so intimate with every domestic and social condition of man, making him the confessor of the home, the censor of public manners, the administrator of social improvements, the social philosopher, out of whose labours legislation springs. Few men have a genius so comprehensive as to be able to grasp the whole of these multi-form relations, but even the humblest, whose path is lit by truth, may in some one career of beneficence have been able, in some degree, to satisfy that yearning of the moral being not to have lived in vain.

How strange it would be to be endowed for one hour with prescience of the varied fate of all the young men attending this Medical School, and now about to launch into life; to track each destiny through all its forms of effort, trial, suffering, and success; to know in what various climes, in contact with what different races of men, through what vicissitudes, perils, and triumphs over chance and evil, the true and earnest spirit will win its way!

How much stranger would it be to be endued with a still higher power, to discern in the mental and moral constitution of each student now present the germ from which his future fortunes would unfold!

I do not speak in the spirit of fatalism. On the contrary, I have a conviction, which nothing can shake, that our moral and mental constitution are in such relation to the external world, that we are invited hopefully to the effort to win our way to mental and moral life, with a promise of victory to all who strive.

You are at the beginning of your career. It cannot, then, be presumed that you have exhausted the forms of evil to which you are liable. There is one great rule of the moral life which experience will indelibly impress—to learn from every error. Let every fault teach a change of life, and save you from its recurrence. There is another law,—that nothing is gained without its price. Experience, learning, wisdom, even the power of moral self-guidance, are all gained at a cost so great, that at length the whole life is paid out to the instalment of its last hour. We purchase our future life at the cost of a life spent in the effort.

There is one great consolation in this thought. The cost you may have to pay for your errors may be the irretrievable loss of every earthly good—fortune, friends, fair fame. You may lose the whole world, and find it pitiless in its refusal to restore to you one fragment of your former good. But all this may be gain. You may have spent the present, but if by it you have purchased the future, you are immeasurably the gainer.

If you have rightly ordered your life, there will be one growing feeling in it, matured by the growth of intelligence, still more by the trials and triumphs of your moral nature; again, by the sense of change, of the creeping on of age, of the way in which the mind is elevated by surviving the periods of passion:—this growing feeling will be the desire for that light, which is the life of the spirit—is immortality itself.

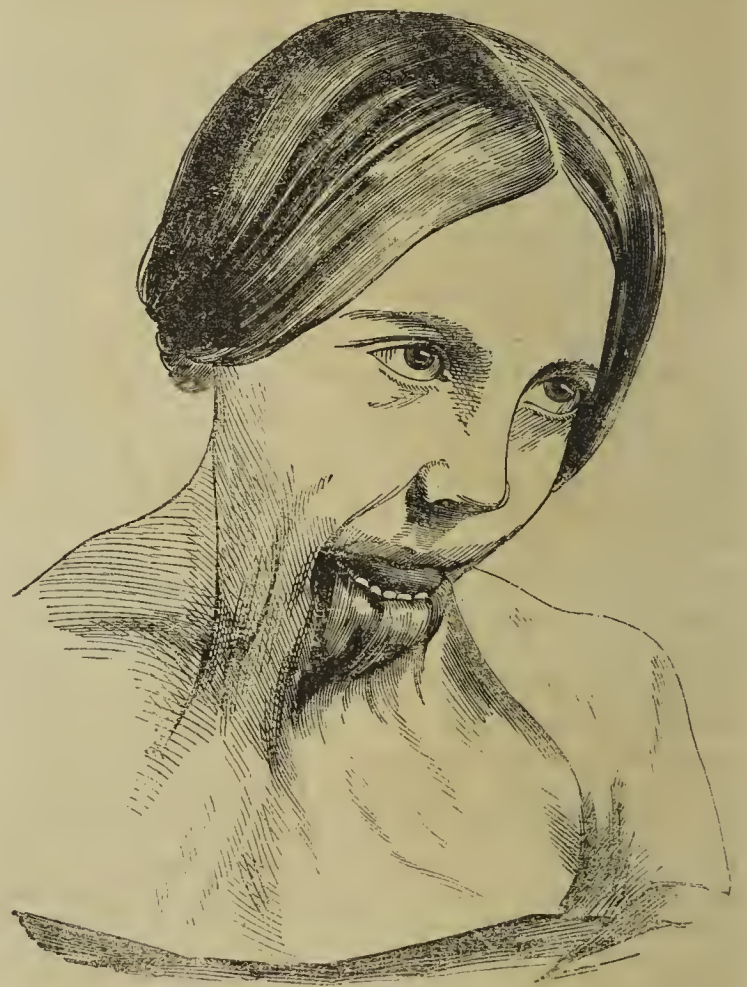
ORIGINAL COMMUNICATIONS.

ON PLASTIC OPERATIONS FOR THE RESTORATION OF THE LOWER LIP, AND FOR THE RELIEF OF SEVERAL DEFORMITIES OF THE FACE AND NECK.

By THOMAS P. TEALE,
Surgeon to the Leeds General Infirmary.

(Continued from page 563.)

Case 1.—Emma Spencer, aged 9 years, was admitted into the Leeds Infirmary in April, 1849, in the hope of being relieved of the distress she suffered from the contraction of scars, caused by an extensive burn a few years before. Her head was bowed down upon the chest; the chin, covered by the everted lower lip, was firmly bound to the upper part of the sternum; strong bands of scar extended on each side from the whole extent of the lower jaw to the clavicular and acromial regions; the lower incisor teeth tended to the horizontal direction; and the saliva was constantly dribbling away. There was scarcely any portion of sound skin in the front of the chest, except a narrow strip beneath the left clavicle. The rest of the integument in this region showed an unbroken surface of scars.



Emma Spencer, April, 1849.

April 20, 1849.—The strong bands of scar on the right side of the jaw and chin were freely divided, and also the bands of adventitious fibrous tissue seen at the bottom of the wound, until loose areolar tissue was reached. A piece of scarred skin, three inches in length and two in breadth, taken from beneath the right clavicle, was then dissected up and turned so as to occupy the chasm formed by the division of the bands of scar. The precautions mentioned in a former part of this communication, as to the application of sutures, and the avoidance of too great tension of the flap, were observed.

On the third day after the operation the flap was found to

have formed organic union by its arcolar surface to the general surface of the wound, but scarcely any union by its cutaneous borders. The healing went on afterwards in a favourable and rapid manner, and the patient was allowed to return home for a few weeks.

In the summer of the same year she again entered the Hospital. The chief bands on the left side of the chin and jaw were divided, and a portion of integument from beneath the left clavicle was transplanted as in the former operation. The flap united in its new position, and the patient again returned home.

January, 1850.—The former operations were found to have greatly restored the movements of the head and neck. The chin was raised considerably from the sternum, and there was a fair amount of lateral motion of the head, although a portion of band still remained on the right side of the neck. Her chief distress at this date was caused by the eversion of the lip, and the inability to hold the saliva.

The operation for restoration of the lower lip, described in the early part of this communication, was performed. The incisions healed rapidly, a good lip was formed, and she returned home able to retain the saliva.

November, 1856.—At my request she came to the Hospital, that her state after the lapse of a few years might be ascertained. Since the operation in January, 1850, she had continued able to retain the saliva. The front incisor teeth had lost much of their horizontal tendency, and in fact had nearly resumed their natural position. The everted mucous membrane had become paler, but was still a little redder than the surrounding skin, and the mucous follicles of the part continued to pour out some fluid.

The photograph for the accompanying engraving was taken in November, 1856.



Emma Spencer, November, 1856.

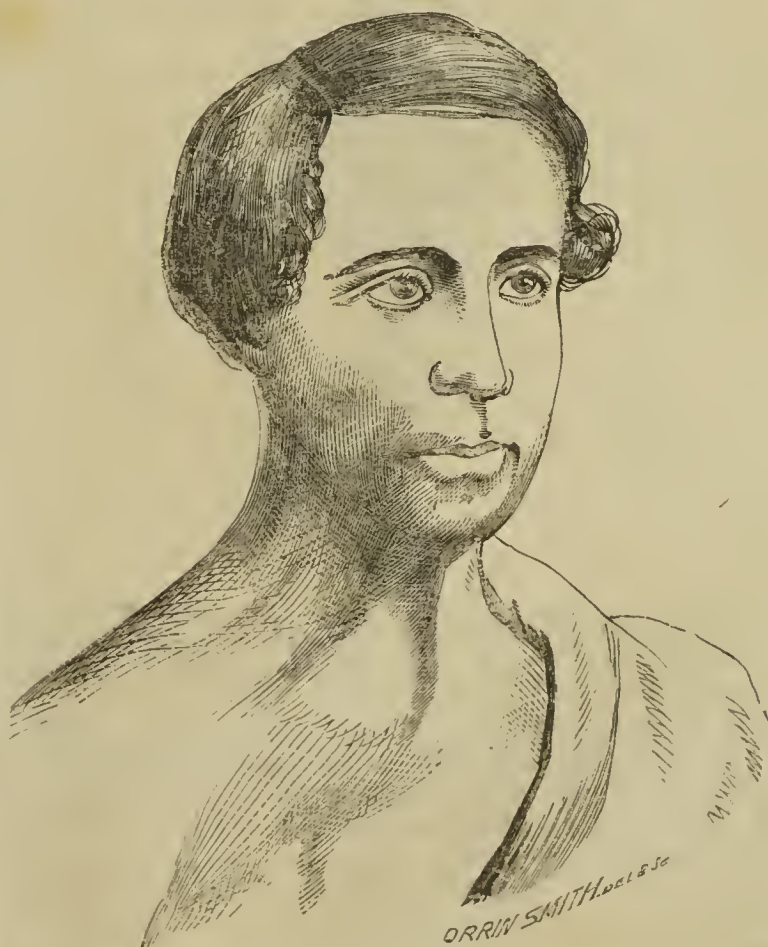
Case 2.—Jonathan Hirst, aged 13 years, was admitted into the Leeds Infirmary in June, 1853. He had been severely burnt about the neck several years before. The head had been drawn down to the chest, and the movements of the neck were much impaired by large bands of sear in front of the throat and on each side of the neck. The lower lip was completely everted and drawn down to the edge of the chin; the lower incisors had a horizontal tendency; the cheeks and

eyelids were drawn downwards, and the saliva could not be retained.



Jonathan Hirst, June, 1853.

June 9, 1853.—A large mass of scar situated on the left side of the neck and in front of the throat was divided, and numerous bands of adventitious fibrous structure were destroyed, so as to expose the natural cellular and adipose tissue beneath. In the space thus produced a flap of skin taken from the chest immediately below the left clavicle was inserted.



Jonathan Hirst, December, 1856.

He returned home on the 18th of August, having the movements of the head and neck restored to a tolerable degree of perfection, and the eversion of the lip somewhat lessened.

June 16, 1854.—The operation already described, for the restoration of the lower lip, was performed. The incisions healed rapidly, and the patient left the hospital on the 7th of July, having a good lower lip and the perfect power of retaining the saliva.

December 3, 1856.—The functions and appearance of the new lip are as perfect or even more so than when Hirst left the hospital in July, 1854. The head is carried erect, and the movements of the neck are free. The portion of skin transplanted into the neck has become stretched out so as to exceed considerably its original size both in length and breadth. The photographic original of the engraving was taken this day. In the engraving representing the patient after operation the portrait has been reversed by the artist, so that the right side of the engraving represents the left side of the subject.

Case 3.—Sarah Kaye, aged 13 years, greatly disfigured by burns on the neck, became a patient of the Leeds Infirmary in April, 1851. The movements of the head and neck were much restrained by a strong band of sear in front of the neck. The lower lip was everted and drawn down to the chin; the lower incisors had a horizontal tendency; the saliva was constantly dribbling away.



Sarah Kaye, April, 1851.

April, 1851.—The strong band of sear in front of the neck was divided, as in the former cases; and a portion of skin, transplanted from the upper part of the chest, was placed in the chasm.

By this operation the movements of the head and neck were nearly restored to their natural state; but the eversion of the lip and the involuntary discharge of saliva continued.

July 21, 1854.—The operation for restoration of the lower lip was performed.

August 2.—The wounds were healed, and the patient left the Hospital able to retain the saliva, and having a pleasing expression of countenance.

The photograph for the accompanying engraving, showing

the condition of the patient after operation, was taken September 29, 1854.



Sarah Kaye, September, 1854.

(To be continued.)

STATISTICAL INQUIRY INTO THE EFFECTS OF CHLOROFORM.

By SAMUEL FENWICK, M.D.

Lecturer on Pathological Anatomy at the Newcastle College of Medicine, (in connexion with the University of Durham.)

(Continued from page 561.)

LITHOTOMY.

As the operation of lithotomy has also been selected for the purpose of showing that the mortality after operations has increased in consequence of the use of chloroform, I have drawn up the following table. In the first division are included all the cases of stone in the bladder admitted since the first establishment of the Hospital in 1751 to the year 1844. As in the greater number of these it is not stated that an operation had been actually performed, I only counted those cases marked dead or cured, and omitted all others. This part of the table, therefore, must be looked upon as showing a larger per-centage of deaths than really occurred. In the second division are 69 operations on males by the lateral method, recorded in the Operation Books between the years 1820—1844. In the third division are 29 cases of a similar operation performed since the use of anæsthetic agents.

	No. of cases.	No. of deaths.	Rate per cent.
From 1751 to 1844 (General Records)	279	68	24
Before chloroform (Operation Book)	69	13	18
Since the use of chloroform (Operation Book)	29	8	28

From the above figures it is evident that this operation has been much less successful since the employment of chloro-

form, 28 per cent. having perished since it was first used, and only 18 per cent. having previously died out of 69 cases. But the question which requires consideration is not what amount of mortality has occurred since the use of ehloroform, but whether the mortality has increased or decreased in consequence of its administration. In the following table I have divided, according to their ages, 88 cases of lithotomy which were performed before, and the 29 operations which have taken place since the use of that drug.

	Before chloroform.			After chloroform.		
Under 10 years of age ..	29	3	10 per ct.	7	..	..
10 to 20	17	..	..	6	1	16 per ct.
20 to 30	4	..	..	2	1	50 per ct.
30 to 40	5	2	40 per ct.	2	1	50 per ct.
40 to 60	17	3	17 per ct.	8	2	25 per ct.
60 to 80	12	5	41 per ct.	4	3	75 per ct.
Above 80	4	2	50 per ct.	..	..	..

We find from these figures that there has been but little increase of mortality since the use of chloroform in persons under 20 years of age ; for 7 per cent. died in the latter series of cases, and 6 per cent. in the former ; but in the more advanced periods of life there has been a great increase in the number of deaths during the last few years. If chloroform had been the cause of the increased mortality, all ages would have suffered, inasmuch as it has been given to all. We must, therefore, inquire for other causes likely to account for this fact. The chief of these I believe to be that the more favourable cases have been operated on by lithotrity ; and in support of this view, we observe that the greater fatality of lithotomy has occurred only among adults. However paradoxical it may appear, I believe that as Surgery improves the general average of mortality, both after amputations and lithotomy, will increase ; in the former, from the operation being confined more and more to those suffering from accidents, and in the latter, from those with a healthy condition of the kidneys and bladder being selected for the action of the lithotrite, and the worst cases only submitting to the knife. The numbers in the last division of Table III. are also too small to admit of our taking them as a positive indication that the mortality has increased from any particular cause, for greater variations have occurred in former periods. Thus, from 1750 to 1771, the proportion of deaths to cures in the stone cases admitted

into this Hospital was only 16 per cent. ; and in the first twenty cases, which are known to have been cut between 1750 and 1757, only 2 died ; while, from 1771 to 1791, 27 per cent. were lost. In the next thirty years the mortality rose to 34 per cent., and from 1820 to 1844, although no change was made either in the wards, diet, or general hospital management, it only reached 21 per cent. I have added the following table, showing the chances of death after lithotomy before and since the use of chloroform.

	Within 4 days.	4 to 7 days.	2nd week.	5th week.	6th week.	7th week.	9th week.
Before chloroform	1 in 11.5	1 in 63	1 in 31	1 in 30	1 in 58	1 in 57	..
Since ehloroform	1 in 4.8	..	1 in 23	..	..	..	1 in 22

It will be observed that the increased mortality since the use of chloroform has taken place entirely within the first four days after the operation, 1 in 4.8 having perished in the latter, and only 1 in 11.5 in the former series. Now as the chief point to determine is whether this greater fatality has arisen from phlebitis, it will be necessary to ascertain at what period after lithotomy this disease usually causes death.

Finding a great discrepancy in the statements of authors as to the usual causes of death after lithotomy, I collected all the accounts of post-mortem examinations after this operation which I met with in the course of my surgical reading ; and to these, 60 in number, I have added 40 which have been published in the *Medical Times and Gazette* since the employment of ehloroform. In only 37 of the whole are the dates of death given, and 13 of these perished within the first four days. Of these, 4 were affected with pre-existing disease, 2 died from shock, 2 from severe injuries to the bladder, 2 from acute bronchitis, and 3 from infiltration of urine into the cellular tissue. There were no deaths during this period from phlebitis, but between the 4th and 21st day, 5 cases died of it. It is, therefore, fair to suppose that the increased mortality in the Newcastle Infirmary has arisen from the accidental circumstance of a larger number than usual having submitted to operation, who were suffering from disease of the bladder, kidneys, or other important organs ; and this on inquiry of the Surgeons I have found to be the case. The post-mortem examinations to which I have just alluded furnish still more decisive evidence that phlebitis has not materially increased since the employment of chloroform. The causes of death of the hundred cases are seen in Table VI.

TABLE VI.

	Alone and uncomplicated.	Shock.	Injuries to bladder.	Hæmorrhage.	Urinary infiltration.	Abscess near bladder.	Inflammation of bladder and kidneys.	Peritonitis.	Phlebitis or pyæmia.	Erysipelas.	Affections of the brain.	Bronchitis and other chest complaints.	Totals.	Per-centage of each.
<i>Before the Use of Chloroform.</i>														
Recent and uncomplicated diseases .. .. .	..	5	3	3	10	2	1	3	5	1	1	1	35	58
Old diseased lungs or heart, complicated with ..	..	1	..	..	..	..	..	..	..	..	..	..	1	2
Old diseased urinary organs, complicated with ..	15	..	..	..	2	1	3	1	..	..	..	..	22	37
Old disease of abdominal organs, complicated with ..	1	..	..	..	..	..	1	..	..	..	..	..	2	3
<i>Since the Use of Chloroform.</i>														
Recent and uncomplicated diseases .. .. .	..	2	2	1	6	..	2	..	4	..	..	2	19	47
Old diseased lungs or heart, complicated with ..	1	..	..	..	..	..	..	..	1	..	..	..	2	5
Old diseased urinary organs, complicated with ..	8	..	..	..	1	2	4	1	..	..	..	2	18	45
Old disease of abdominal organs, complicated with ..	..	..	..	..	..	1	..	..	..	..	..	..	1	3

This table shows that the relative proportion of deaths arising from the operation in healthy persons has diminished since the use of chloroform ; 58 per cent. having died in the former, and only 47 per cent. in the latter period. Under the head of "Pyæmia," I have included all the cases in which pus was found after death in the joints or viscera. Before the use of chloroform, five deaths (uncomplicated with old disease) occurred from this cause, or 8.3 per cent., and since its use four have died out of forty, which is 10 per cent. The increase, therefore, is so trifling that it is probably accidental, and certainly cannot account for any increased mortality which may have been observed.

Undoubtedly the most formidable accident after lithotomy is the infiltration of urine, and here there is no sign of increase since the use of ehloroform, 12 cases having occurred out of 60, or 20 per cent. in the former series, and only 17 per cent. since it has been introduced. As might have been expected from the previous inquiry into the effects of chloroform on amputations, the proportion of persons dying from shock has been less in the latter series than in the previous one ; 5 per cent. having died since its use, and 10 per cent. previously. But a number in each series have sunk after the operation, in whom old disease of the kidneys or bladder existed, uncomplicated with recent affections. In these, pro-

bably, the operation had also produced death from shock. Adding together all under these two heads, 36.6 per cent. died before, and only 27 per cent. since the use of anæsthetic agents. The great increase in deaths from bronchitis is worthy of attention, and may, perhaps, have arisen from the injudicious employment of chloroform.

From the above considerations it will, I think, be perfectly plain that chloroform has, with perhaps the exception of bronchitis, produced no deleterious effects upon those undergoing the operation of lithotomy. It is also evident that the proportion of deaths from phlebitis has not increased, and at the same time, that fewer have perished from the shock of the operation.

(To be continued.)

UNSUSPECTED PREGNANCY— UNEXPECTED BIRTH.

By JAMES LONG, Esq.

THE following case, in a Medico-legal point of view, is, I think, worthy of record. Early on the morning of April 17 a gentleman called upon me, and requested me to visit his wife (whom I had not previously seen), as she was suffering severely from spasms; he informed me she had on the previous night taken a dose of Gregory's powder, which had acted on the bowels about 5 that morning; such severe pain, however, came on afterwards, that she was compelled to walk about the room. The pain having ceased, she dressed and went down to breakfast; whilst seated at table, the pain had returned so severely, that both he and she were under the impression she had taken a wrong medicine. He left, and in about twenty minutes returned, and desired me to visit his wife immediately. On our way to his house, which was in my neighbourhood, he informed me; on his arrival at home, he had found her so ill in the breakfast-room, that he at once carried her up-stairs and placed her on the bed, and he had a strong suspicion she was giving birth to a child. On arriving at his house, not much more than half-an-hour after the first summons, I found a child, of apparently about seven months, born. I ascertained from the lady, as I had already done from the husband, that she had not the slightest idea she was pregnant, nor had any notion what was about to happen. This seemed the more surprising, as she was of a delicate, slender figure, with, however, a very capacious pelvis.

On further inquiry, I learned that she was 24 years of age, that menstruation had commenced at 14, and had been very irregular, and had on one occasion ceased for a period of eight months. Her general health was frequently deranged. She was married June 25 last year, and for the twelve months preceding her marriage her menstruation had been regular. After marriage she had been twice unwell, the last time in the middle of September, but she had a slight show towards the end of November. Since her marriage her general health had improved so much, that she had been free from ailments of all descriptions, and had learned what to feel well, meant. She had noticed that she had become somewhat stout, and that her breasts were fuller, but these she attributed to her improved state of health. Nothing had occurred in any way to lead her to suspect she was pregnant, the cessation of the menstrual discharge for so long a period being, as it had occurred before, set down to some accidental cause. She and the baby progressed well in every respect, except that she was unable to nurse it, owing to a deficient secretion of milk; the same thing happened to her mother (who has had several children), after all her confinements.

Liverpool, June 3, 1857.

ON THE TREATMENT OF NÆVI.

By J. COOPER FORSTER, M.B. Lond., F.R.C.S.

Assistant-Surgeon to Guy's Hospital, Surgeon to the Royal Infirmary for Children, etc.

A CASE of nævus, of the mixed variety, about the size of a fourpenny-piece, was sent to me by my friend Mr. Roper, of Shoreditch. I adopted the plan for its cure which I am in the habit of doing for small nævi, viz. passing two pins at right angles to each other under the mass, and placing one ligature around the whole, tying it tightly, and withdrawing

the pins. In the course of four or five days, the nævus having shrivelled up with the thread, drops off, leaving an open sore to granulate, which it does rapidly or not, according to the condition of the patient, and an unsightly scar is necessarily the result. In the case to which I allude, the ligature came off accidentally four hours after it had been applied, and I feared that, probably, the usual result would not be attained, but was agreeably surprised to find that the nævus which had been tied dried up, and formed a shrivelled mass, under which the curative process went on without any suppuration; and when the whole dropped off, which it did in the course of twelve days, there was scarcely any scar to be seen. In consequence of the success of this treatment, I have been induced to adopt it several times since, in each case with the same result. I simply pass the pins at right angles to each other under the nævus, tie the whole in a bow knot, remove the pins immediately, and at the end of four hours untie the ligature. A scab forms, which drops off at the end of fourteen days or so, without any suppuration, open sore, or untoward result occurring.

The rationale of the treatment appears to me to be, that the vessels compressed by the ligature have the current of blood in them arrested for a time, but not sufficient to so entirely obliterate them as to cause the part encircled to slough at once. By this means entire destruction of the nævus is prevented, but sufficient obstruction is caused to allow the blood in the tissue to become consolidated; and the whole becomes atrophied and drops off, leaving scarcely any scar. When this plan can be adopted, I believe it will be found eminently superior to any other for the kind, form, and size of nævus I have mentioned; it is only a modification of the ligature, which I most unhesitatingly affirm to be the only plan of treatment to be adopted with any certainty of success, when the skin and areolar tissue are involved, when, indeed, we have what I am in the habit of describing as the mixed variety of nævus. In the subcutaneous form the injection with perchloride of iron produces, as I mentioned some years since, the most striking and salutary effect, and is applicable where no other kind of treatment can be adopted, owing to the locality of the disease; but it is only in a few cases, comparatively, that it should be used.

Wellington-street, London-bridge, May, 1857.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

STATISTICAL REPORT OF THE PRINCIPAL OPERATIONS PERFORMED DURING THE FIRST QUARTER OF 1857.

(Continued from page 538.)

THE subjoined Report includes, as usual, the following Hospitals:—University College, King's College, St. Bartholomew's, St. George's, Guy's, St. Thomas's, the London, the Middlesex, the Westminster, Charing-cross, St. Mary's, the Metropolitan Free, the Marylebone, the Hospital for Sick Children, and the "Dreadnought" Seamen's Hospital.

EXCISIONS OF JOINTS.

Case 1.—St. Bartholomew's: Mr. Lawrence.—A delicate woman, aged 32. Admitted on account of disease of the elbow-joint, of a year's duration. There was a single small fistulous opening on the inner side, through which a probe passed into the joint. The disease seemed to be limited to the olecranon, as the radius could be rotated without pain. The joint was laid freely open by a single long incision, and the bones having been exposed, the olecranon, and part of the trochlea of the humerus were removed. The head of the radius and the remaining portion of the humerus seemed healthy, and were allowed to remain. The limb was afterwards retained on an angular splint. The wound healed well, but there was only a slight degree of movement obtained.

Case 2.—St. Bartholomew's: Mr. Stanley.—A lad, aged 14, who had for long been an inmate of the Hospital on account of disease of the hip-joint. Excision of the head of the femur was performed in the usual way. The head of the bone was

removed by bone pliers. The lad has done fairly since the operation. Under treatment.

Case 3.—The Metropolitan Free: Mr. Hutchinson.—A lad, aged 14, in fair health; the subject of necrosis of the tibia, extending into the ankle-joint. The sequestra had been removed from the shaft of the bone by previous operations, but there remained much swelling around the ankle, and a number of sinuses, all of which led to diseased bone. The astragalus and tibia were partially ankylosed. The joint was opened by means of the trephine applied to the inner side of the tibia, and several portions of the articular facet of the latter in a necrosed state were taken away. The wound has since healed with the exception of a very small sinus, and the boy is able to walk upon the diseased foot.

Case 4.—St. Bartholomew's: Mr. Coote.—A man, aged 28, had received an injury to his elbow in a fall nine years ago, which caused abscess, and was followed by stiffening. The joint had ever since been more or less painful, and the limb useless. A complete excision of the articulation was performed, the single long incision being adopted. The bones were deeply carious, and in the olecranon was a circumscribed cavity containing pus. The limb was afterwards retained on an angular splint, and the healing process went on most satisfactorily.

Case 5.—King's College: Mr. Bowman.—A fair-complexioned strumous boy, in delicate health, aged 11, for eighteen months past the subject of chronic disease of the hip-joint. Abscesses had broken out about two months ago, and two open sinuses existed. The openings of the sinuses were near the trochanter, and presented deep ulcers. The amount of swelling was not very great. Excision of the head of the bone was performed, the shaft being sawn across on a level with the lesser trochanter. The articular head was found in the acetabulum, but it was carious and deprived of cartilage. The carious surface of the acetabulum was gouged out. The case has since progressed very satisfactorily. Under treatment.

Case 6.—St. Thomas's: Mr. South.—A young woman, in delicate health, the subject of old disease of the left knee-joint with necrosis of the tibia. The right knee was also contracted and stiff. Excision of the left was performed. Much trouble subsequently ensued in keeping the limb straight, and some exfoliations of bone took place. Recovered with a bent limb.

Case 7.—St. Thomas's: Mr. South.—A very cachectic lad, aged 20, the subject of disease of the left knee-joint of a year's standing. The joint was quite disorganised, and the lad's health much reduced by pain and suppuration. The joint was laid open by the semilunar incision, and the articular surfaces of tibia and femur sawn away. The patella was gouged and allowed to remain. The limb has since been kept in a perfectly straight position, and all promises to do exceedingly well. The wound is fast healing.

AMPUTATIONS.

Number of cases, 47; recovered, 37; under treatment, 1; died, 1.

At the Hip-Joint.—*Case 1.*—St. Bartholomew's: Mr. Stanley.—A man, aged 55, the subject of malignant disease of the femur, extending as high as its articular head. Amputation at the hip-joint. Death from hæmorrhage the same afternoon. (For details see *Medical Times and Gazette* for April 18, p. 384.)

Double Amputation.—*Case 2.*—St. Thomas's: Mr. South.—A woman, aged 33, was admitted, having had both ankles completely crushed. Primary amputation of both was performed. Death occurred three weeks afterwards. The immediate cause of death appeared to be an attack of uterine hæmorrhage, by which she was much exhausted.

Of the Thigh.—*Case 3.*—St. Bartholomew's: Mr. Stanley.—A boy, aged 9, was admitted, with the account that his leg had been severely crushed by a shutter falling on it. There was no fracture of bone, nor any external laceration. There was great swelling about the popliteal space, and the absence of pulse in the arteries of the foot, and the appearances of commencing gangrene induced immediate amputation. The operation was performed about three hours after the accident. On examination the popliteal vessels were found torn across, and separated for a considerable distance. The boy recovered well. *Case 4.*—St. Bartholomew's: Mr. Stanley.—A miserably feeble man, aged 46. Amputation just below the great trochanter was necessitated by extensive sloughing of the integuments after erysipelas. The artery was tied before the posterior

flap was cut, in order to prevent the loss of blood. The man gradually regained his health afterwards, and made a good recovery. *Case 5.*—Guy's: Mr. Cock.—A feeble man, aged 33, in whom diseased knee-joint and necrosis of the femur had existed for two years. Amputation in the upper third of the thigh. An immense quantity of new bone had been formed encasing the sequestrum. Both shell and sequestrum were sawn through, and a large fragment of the latter was extracted from the upper part of the bone afterwards. The man recovered slowly, and is now well. *Case 6.*—St. Bartholomew's: Mr. Stanley.—A man, aged 36, in much reduced health from the effects of disease of the knee-joint of two years' duration. Amputation. Recovery. *Case 7.*—The Westminster: Mr. Holthouse.—A lad, aged 20, delicate and strumous, the subject of diseased knee-joint. The tibia was displaced backwards, and there was much swelling. Amputation. Recovery. *Case 8.*—Guy's: Mr. Birkett.—A man, aged 27, very cachectic, and the subject of albumenuria. Amputation in lower third of thigh on account of caries in the head of the tibia. Recovered. *Case 9.*—Guy's: Mr. Birkett.—A woman, aged 34, of bad constitution and cachectic. Amputation in the lower third of thigh on account of necrosis of the head of the tibia and diseased knee-joint. Recovered. *Case 10.*—Guy's: Mr. Birkett.—A man, aged 48, very cachectic. Amputation on account of contracted useless limb from sloughing after phlegmon. The gastrocnemii had been destroyed. Exfoliation of the extremity of the femur followed the operation, but the man recovered. *Case 11.*—The London: Mr. Curling.—A cachectic man, aged 42. Amputation on account of acute disease of the knee-joint of six months' duration. Recovered. *Case 12.*—Guy's: Mr. Cock.—A woman, aged 65, in bad health. Amputation in middle third on account of old standing disease of the knee-joint, with dislocation of the tibia backwards. The joint was full of pus, and completely disorganized. Recovered. *Case 13.*—Guy's: Mr. Hilton.—A girl, aged 8, in very feeble health for two years; the subject of malignant disease of the fibula. Amputation had been advised a year before, but refused by the parents. The child recovered well, and some glands in the groin, which were enlarged, did not increase during the time she remained under observation. The tumour had grown to a very large size. *Case 14.*—St. Thomas's: Mr. Simon.—A feeble man, aged 42. Amputation on account of diseased knee-joint. Recovered. *Case 15.*—Guy's: Mr. Hilton.—A fairly healthy woman, aged 28, the subject for eighteen years of necrosis of the head of the tibia and diseased knee-joint. Amputation. Recovery. *Case 16.*—Guy's: Mr. Hilton.—A lad, aged 17, in fair health. Amputation through the middle of the thigh on account of myeloid disease of the femur of six months' duration. Recovery. *Case 17.*—St. Mary's: Mr. Walton.—A railway stoker, aged 33. Primary amputation on account of crushed knee. He did not rally, and died about forty hours after the operation. *Case 18.*—The Charing Cross: Mr. Canton.—A woman, aged 54, the subject of malignant disease of the lower part of the femur, extending into the knee-joint. The swelling was very great, and had increased rapidly. She was much reduced in strength. Death, probably from absorption of matter, a month after the operation. *Case 19.*—Guy's: Mr. Cock.—A man, aged 22, in very bad health. The leg had been amputated some years ago. Disease of the knee-joint now existed, and for this amputation in the middle third of the thigh was performed. He rallied, and was improving up to the seventh day, when acute tetanus set in, of which he died a week later. *Case 20.*—St. Thomas's: Mr. Simon.—A man, aged 50, was admitted, having had both legs crushed by the fall of a large stone. There was a compound and comminuted fracture of the left tibia and fibula, with laceration of the vessels. Primary amputation through the thigh. Death on the third day.

Of the Leg.—*Case 21.*—Guy's: Mr. Cock.—A woman, aged 21, on whose foot an operation, involving the removal of several of the tarsal bones, had previously been performed. The disease had persisted; and, as her health was failing, amputation through the lower third of the tibia was performed. Well. *Case 22.*—Guy's: Mr. Forster.—A man, aged 32, in good health. Primary amputation of the leg on account of crushed foot, etc. Gangrene of the stump and phlegmonous erysipelas followed, but the man ultimately recovered. *Case 23.*—St. Mary's: Mr. Walton.—A man, aged 33. Amputation of the leg in the lower third, on account of diseased tarsus, the result of frostbite in the Crimea. Recovered. *Case 24.*—

The London: Mr. Luke.—A man in feeble health, aged 49. Anchylosis of the joints of the toes, and disease of the integument after diffuse inflammation had rendered the foot useless. Amputation was performed, at the patient's desire. The flaps sloughed, and at the time of report the man was in a low and feeble state. *Case 25.*—The Westminster: Mr. Holthouse.—A woman, aged 45, in good health. Primary amputation on account of compound comminuted fracture of the leg, just above the ankle. Recovered after rather profuse suppuration of the stump. *Case 26.*—King's College: Mr. Fergusson.—A woman, aged 20, in good health. Amputation of the leg, on account of congenital paralysis of the foot. Recovered. *Case 27.*—King's College: Mr. Partridge.—A healthy man, aged 39, admitted on account of conical and ulcerated stumps of both legs, after a double primary amputation eighteen months before. The first operation had been performed on account of a crush in a sugar-mill in Cuba. Mr. Partridge reamputated the right leg a little below the knee on November 12, 1856, and the man recovered with a good stump. In February the left leg was reamputated, and unfortunately death from pyæmia followed. (See case No. 35, below.) *Case 28.*—King's College: Mr. Partridge.—A woman, aged 36, in good health. Amputation on account of ulceration of the foot, with contraction. Recovered. *Cases 29 and 30.*—St. Bartholomew's: Mr. M'Whinnie.—A healthy young woman, aged 19. Both feet had been lost by spontaneous gangrene ten years before, and the stumps left by disarticulation at the ankle-joints had never become sound. Mr. M'Whinnie amputated both in the lower third of the leg, an interval of about two months having intervened between the two operations. Well. *Case 31.*—St. Thomas's: Mr. Simon.—A strong, healthy man, aged 27, admitted on account of comminuted fracture, with laceration of the anterior tibial artery. Primary amputation. Recovery. *Case 32.*—St. Bartholomew's: Mr. Stanley.—A man, aged 70. Amputation in the upper third, on account of diseased tarsus. Recovery. *Case 33.*—Guy's: Mr. Daniel, House-Surgeon.—A man, aged 32, in good health, but of intemperate habits, was admitted on account of crushed foot. Primary amputation. Death from pyæmia on the eighteenth day. *Case 34.*—The London: Mr. Adams.—A sailor, aged 49, admitted with suppurative inflammation of the foot from an injury received a week previously. The disease extended to the ankle-joint, and eight weeks after admission amputation in the mid-leg was performed. Delirium followed soon after the operation, and continued until the time of death, three weeks later. *Case 35.*—King's College: Mr. Partridge.—A man, aged 39, both whose legs had been amputated in Cuba eighteen months before. (See Case, No. 27.) He had recovered after a reamputation of the right leg, and three months later the left was also again amputated. On the sixteenth day after the last operation a rigor occurred, and this was repeated daily for several days. Death, with all the symptoms of pyæmia, occurred five weeks after the operation. At the autopsy pus was found in one wrist and in one hip-joint, and there were deposits of tubercle in the lungs.

Of the Foot.—*Case 36.*—King's College: Mr. Partridge.—A strumous girl, aged 6. Pirogoff's amputation of the foot was performed on account of diseased tarsus. The tendo-achillis was not divided. Recovery with an excellent stump.

Of the Upper Extremity.—*Case 37.*—The London: Mr. Adams.—A man, aged 56, whose little finger had been amputated eight weeks before. Inflammation had extended up the arm, and involved the wrist-joint. Amputation through the forearm. Recovery. *Case 38.*—The London: Mr. Ward.—A man of middle age, and in good health. Primary amputation through the arm on account of crushed hand and forearm. Recovered. *Case 39.*—The London: Mr. Luke.—A healthy boy, aged 17, admitted on account of crushed hand and forearm. Primary amputation through the forearm. Recovered. *Case 40.*—St. Mary's: Mr. Ure.—A feeble man, aged 35. Amputation through the forearm on account of diseased wrist, and carpus. Recovery. *Case 41.*—St. Mary's: Mr. Walton.—A labourer, aged 37, whose hand and forearm had been crushed by a fall of bricks. Amputation through the arm on the morning after the accident. Recovery. *Case 42.*—The London: Mr. Adams.—A healthy man, aged 37. Primary amputation through the forearm on account of crushed hand. Recovered. Some necrosis of the ulna followed the operation. *Case 43.*—Guy's: Mr. Hilton.—A man, aged 33, in good health. Primary amputation through the fore-

arm on account of malignant disease in the palm of the hand. Recovered. *Case 44.*—Guy's: Mr. Cock.—A woman, aged 53, in very bad health. Amputation on account of paralysis of the hand, attended with intense pain. A condition approaching to senile gangrene was threatened. Amputation just below the elbow. Under treatment. *Case 45.*—King's College: Mr. Partridge.—A boy, aged 14, in good health. Primary amputation above the elbow on account of crushed arm. Recovered. *Case 46.*—The London: Mr. Adams.—A healthy man, aged 60. Primary amputation through the arm on account of crushed hand and forearm. Death on the seventh day. From the severe collapse which had existed since the operation, some internal lesion was suspected to exist. No autopsy. *Case 47.*—St. Bartholomew's: Mr. Stanley.—A woman, aged 44, in an extremely feeble state from the effects of phlegmonous erysipelas of the arm. As a last resource amputation through the upper arm was performed. Some bleeding followed, necessitating the opening of the stump, and plugging of the medullary canal of the bone. Death 20 hours after the operation.

HOSPITAL NOTES.

SYPHILITIC SORE ON THE LIP, WITH AN UNUSUAL HISTORY.

"E. E., aged 30, a nurse in Faith's ward, gave the following statement:—That about fourteen days ago, while washing a patient affected with rupia and scabies, she distinctly remembers using the same towel to wipe her own lip, on which at the time she had a mere simple crack, and that ten days after that, as the sore was increasing, she sought Medical advice. As her health had also been suffering in consequence of her arduous duties, and in the opinion that the ulcer had had no specific origin, she was ordered a nutritous diet and the elcholate of potash and bark. Under this plan, which was steadily pursued for about a week, no beneficial effect resulted. She was then seen by Mr. Stanley, the sore presenting the following appearances:—In the centre of the lower lip was an ulcer about the size of a fourpenny piece, somewhat oval in shape, having an indurated base, and covered by an ash-coloured slough. The glands in the neck were tender, and slightly inflamed. The same plan was pursued for a few days, when finding that the sore was extending, she was ordered a gentle mercurial course, dressing the ulcer with black wash. From that time the sore improved in character. She soon became salivated; the mercury was discontinued; water dressing is applied to the sore, which is now rapidly contracting."—The above notes have been furnished to us by Mr. Edgar Barker, the House Surgeon in charge of the case. It is an example of a class of cases which one every now and then meets with, in which patients present sores resembling those of primary syphilis on very unusual sites. The lip is a part, according to our own observation, more frequently the location for such sores than any other. To believe that a constitutional eruption, such as rupia, is capable by inoculation of producing a primary chancre, is to ignore a large body of evidence collected by very trustworthy investigators. Perhaps the most easy way of removing the difficulty is to suppose that the patient from whom the contagion was thought to have been derived, had, in addition to the eruption, a primary sore. Other conjectures, of course, suggest themselves, the subject being surrounded by the numerous sources of fallacy which belong so especially to all inquiries respecting venereal affections. Not unfrequently the consciousness of having been exposed to other risks induces the subject of one of these erratic affections to invent a story by which to lull the suspicions of the Medical attendant. At any rate the important practical lesson to be remembered is, that primary syphilitic sores may be met with in any part of the body, and on persons to whom no suspicion would at first sight have attached.

DIFFERENTIAL DIAGNOSIS OF VAGINAL THROMBUS FROM PELVIC ABSCESS.

We mentioned a few weeks ago a case of much interest, under the care of Dr. Oldham, in Guy's Hospital, in which a large swelling in the pelvic cellular tissue following parturition had been diagnosed as extravasated blood, in contradistinction to pelvic abscess. The points in the case which had led Dr. Oldham to this opinion were that the tumour had formed almost without pain or constitutional disturbance, and

that it was not tender to the touch. The subsequent progress has fully borne out the opinion expressed. The tumour has been slowly absorbed, and a small induration is now all that remains. The woman has greatly improved in health, confinement to the recumbent position and a liberal diet having been almost the sole remedies employed. Now, although undoubtedly examples do occur of the absorptive removal of pelvic abscesses, yet, for one which had become so prominent as was the case in this instance, such a termination is probably exceedingly rare. The opinion that the tumour was really an example of vaginal thrombus was, it will be remembered, supported by reference to one in which Dr. Oldham had opened the swelling, expecting to find matter, and had found only the remains of extravasated blood. The subject is one to which comparatively little attention has been given, but it is not improbable that, were the diagnosis more carefully sifted, some of the cases believed to prove the absorption of pelvic abscess would prove to have been only effusions of blood.

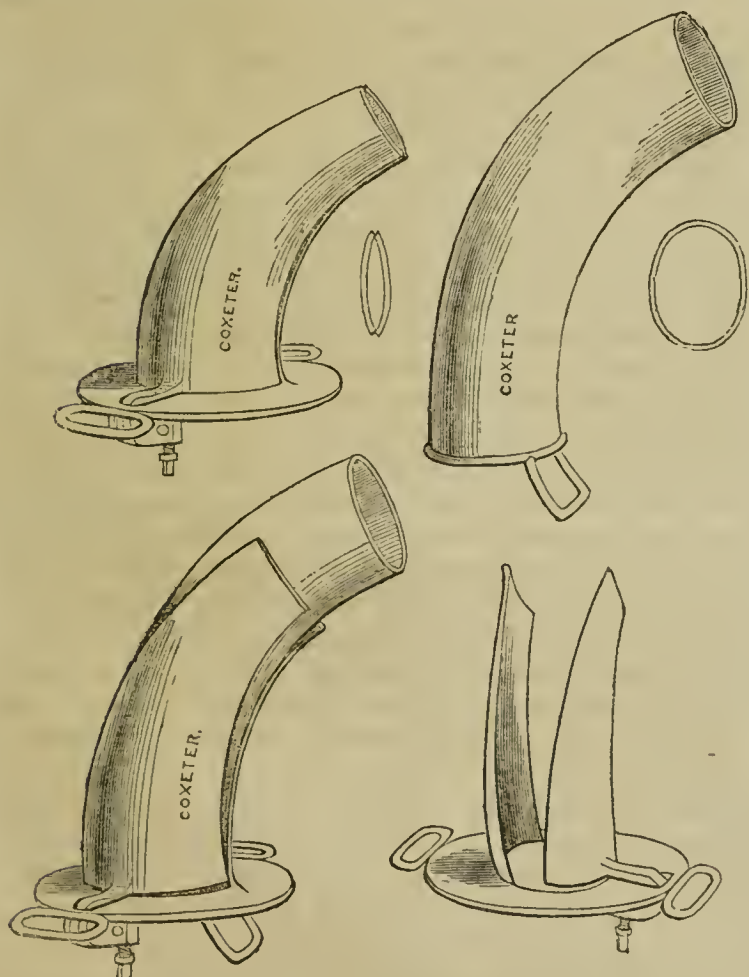
EXPECTED OPERATIONS.

At St. Thomas's, on Saturday, this day, Mr. South will probably excise the head of the femur in a case of hip-joint disease. Mr. Solly has also a case in which it is proposed to excise the knee-joint. Mr. Simon has three cases in which it is intended to remove necrosed bone. At King's College Hospital Mr. Fergusson has a case of excision of the knee-joint, and an operation for hare-lip, and one for nævus. At the Metropolitan Free, on Monday, Mr. Hutchinson has a case in which a very large congenital tumour on the neck and face of a child is to be removed, and one in which an operation is to be performed for necrosis of the great trochanter. Next Wednesday, at St. Mary's, Mr. Haynes Walton has a case of lithotomy.

NEW INSTRUMENT.

DR. FULLER'S DILATING TRACHEA TUBE.

SUBJOINED is a representation of the trachea tube exhibited by Dr. Fuller at the Medico-Chirurgical Society on Tuesday, the 26th of May. It was constructed by Coxeter, of Grafton-street East, at Dr. Fuller's suggestion, according to the directions given in his paper on Tracheotomy in Croup. It consists



of two tubes, an inner and an outer one. The inner tube is longer than the outer one, somewhat flattened from side to

side, of uniform diameter throughout, and so constructed at its internal or inferior extremity that the direction of its internal orifice shall be at right angles to that of its external orifice. The outer tube is divided vertically and longitudinally into two blades, which do not make up a perfect tube, but are merely the flattened lateral portions of a tube, the upper and lower portions of which have been cut away. These blades are fastened at their outer extremity by a hinge, which admits of their inner or inferior extremity being brought together in a wedge-like form, in the same manner as the blades of a dilating bivalve speculum. When thus closed they can be introduced into the trachea through a very small incision, and then may be expanded without a moment's delay by merely pushing in the inner tube between them. A small screw is placed close to the joint, which by a few turns forms a stop, and effectually fixes them in their expanded position. As soon as they are thus fixed, the inner tube may be withdrawn if necessary for the purpose of cleansing, leaving the outer one in the position delineated in the fourth figure.

The peculiarities and advantages of Dr. Fuller's instrument over the tracheotomy tubes in common use are—

1st. *The uniformity of the diameter of the inner tube.*—This not only ensures uniformity in the force of the expiratory blast throughout the whole length of the tube, and thus renders obstruction far less probable, but it enables us to judge by the size of the outer orifice whether the calibre of the tube is capable of admitting a sufficient supply of air; a fact which it is impossible thus to ascertain when ordinary trachea tubes are used, inasmuch as they are tapered off, to a greater or less extent, according to the fancy of the Surgeon or the instrument-maker.

2nd. *The direction of the internal orifice.*—This obviates all possibility of obstruction arising by the tube being pushed against the posterior wall of the trachea, an accident which may readily occur with many of the trachea tubes in common use.

3rd. *The construction of the outer tube.*—This not only facilitates the introduction of the tube through the edges of the incision, but renders serious obstruction well nigh impossible, inasmuch as should the inner tube become obstructed, its withdrawal would at once open a free channel for the admission of air through the expanded blades of the outer tube.

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Medical Times & Gazette.

SATURDAY, JUNE 13.

THE SALE OF POISONS BILL.

On the 4th inst. the Sale of Poisons Bill was referred by the House of Lords to a Select Committee. This will ensure a full consideration of the clauses, with the introduction of such amendments as, from evidence adduced, may be proved to be necessary.

Our remarks on this subject last week, were chiefly directed to the list of substances proposed by the Bill, and for the purposes of the Act, to be called "poisons." It is scarcely necessary to state that no definition of a poison adapted to the purposes of a Restriction act can be given. Those who advise that a "poison" should be defined before legislation is attempted, are simply advising that there should be no practical

legislation on the subject! Neither in English Acts of Parliament regarding poisoning, nor in the ordinances of the French government, do we find any attempt to define what is a "poison." Most poisons are medicines, and most medicines are poisons, according to the dose and the intention with which the substances are administered. A poison in a small dose is a medicine, and a medicine in a large dose is a poison. To object to a restriction schedule because it includes some useful remedial agents is, therefore, a practical absurdity, if it does not indicate a desire on the part of the objector to defeat legislation by an appeal to the prejudices of the public.

We have already made some remarks on the proposed exemption of *laudanum*, and have endeavoured to show the mischief that would arise from such exemption if admitted. On this head valuable evidence could be procured from the police magistrates of the metropolis, coroners, and the House-Surgeons of Hospitals and Infirmarys. If no restriction be placed on the sale of this drug,—if, as now, a person suffering from neuralgia, etc., may procure it at once in any quantity from the nearest druggist's or a village shop, the sale must be equally open and unrestricted to a person intending suicide, to another intending to poison an infant, to a third intending to hocus an individual for the purpose of robbery, rape, or murder. It is idle to talk of the small quantity sold being a check on a criminal. A number of small quantities make a large dose; and if thirty drops can be procured without restriction at a druggist's, the same dose can be procured at fifty shops, and each vendor excuse himself by saying that he did not sell a fatal dose, and would not have sold a larger quantity had it been asked for! The purchaser, it may be said, represented that he or she was suffering from severe toothache, and had been in the habit of taking laudanum for relief. The placing a warning label on the bottle, with the address of the druggist, is now optional; hence if there is no criminal design in procuring the drug, it may lead to accidental death, as it has in numerous instances, by being taken or administered as a black draught, which, in the size and shape of the bottle, it may closely resemble. Supposing that the laudanum be criminally used, then, in the absence of a label, or of entries in books, it will be impossible for the purposes of justice to trace the sale, or to fix the suspected party as the purchaser. Is this a proper state of things in a country which boasts of its special care of human life, even in reference to the meanest subject of the Crown? On the contrary, is not England, in this respect, an exception to every kingdom or empire on the continent?

Let us consider how the Bill would deal with such a case as that which we have above supposed. It requires the neuralgic patient, if he have not provided himself with the remedy or with a certificate, to apply for it at the shop of a person who has proved, by examination and licence, that he is competent to prescribe and administer the drug. These apothecary-druggists are sufficiently numerous: if, however, he prefers procuring the drug at a general shop in a remote village, where no apothecary is to be found, he can do this upon a certificate which, in the event of a misuse of the drug, will enable the vendor and purchaser to be traced. At the same time he must take the risk of being supplied with tincture of hemlock or aconite in place of his "accustomed means of relief." Hocussing for the purpose of robbery or rape, and the crimes of suicide and murder, will not be prevented by such precautions, but so far as this drug is concerned there will be less facility for the perpetration of these crimes than there is at present; and if perpetrated, there will be greater facility in tracing and convicting the perpetrator.

Legislation can scarcely be carried out to the benefit of the many without producing injury to the few, or, as a contem-

porary well expresses it on another subject: (a)—"Freedom of all kinds, commercial as well as individual, must be more or less interfered with by the exercise of general control; but as such control is manifestly demanded in the interests of the public, we can only trust to approximate to the exact means by which the *maximum* of advantage may be combined with the *minimum* of detriment." If our legislators had to deal only with the educated Members and Associates of the Pharmaceutical Society, the case would be different. According to Mr. Walter Wilson, (b) in the year 1831, the chemists and druggists in England numbered 5835, while in 1851 there were 15,643 persons engaged in this business and therefore in the retail of poisons. They are classed as follow:—

	Men.	Women.
Under the age of 20 years . . .	3632 .	12 .
Of the age of 20 years and upwards	11,701 .	298 .
Total	15,333 .	310 .

It is probable that there has been an increase in these numbers during the six years which have elapsed since the last census.

A list of the Members and Associates of the Pharmaceutical Society was published in 1856 (c), and from this it appears that the Society was thus constituted:—

London Members	395
Country Members	1612
Associates	315
Total	2322

Allowing for omission of names, by non-payment of fees, etc., the number of educated Pharmacutists may be taken in round numbers at 2500. Deducting this number from the total engaged in the business, according to the census of 1851, we have the startling fact, that there are upwards of *thirteen thousand persons* engaged in the trade of vending poisons, who, so far as is known, have undergone no education, examination, or test of qualification, for conducting a business fraught with such danger to the public.

It is, therefore, not a shadow but a reality with which legislation has to deal in disposing of the rights of these thirteen thousand claimants. Among them there are probably many who, although not members of the Pharmaceutical Society, have acquired practical experience in their trade, and conduct it with reasonable skill and care. It would, doubtless, be the best security for the public, if to them and to the Pharmaceutical Chemists the right of vending poisonous drugs was restricted. But how is such a class of skilled Druggists to be defined and enumerated? Beyond doubt, it would be an excellent arrangement if none were permitted to sell poisonous drugs who had not undergone examination and received a licence; but looking at the conflicting interests of Apothecaries and Druggists, the sale of drugs by the former class, and the prescription as well as sale of poisonous drugs by the latter, and regarding the antagonism of the Apothecaries' and Pharmaceutical Societies, it is not at all probable, even if the rights of thirteen thousand drug-dealers were summarily disposed of, that such a measure could be framed as would satisfy the public and the parties pecuniarily interested. In the meantime, the fact is patent—there are weekly if not daily poisonings, which might, to a great extent, be prevented. Valuable lives are lost, and any member of society, peer, bishop, or commoner, is liable to be cut off through

(a) *Times*, June 6, 1857.

(b) *The Bane and the Antidote, or Poisoning and its Suppression*. Birmingham, 1856.

(c) See *Pharmaceutical Journal*, and *Transactions* for August, 1856.

the grossest ignorance and carelessness (a). Assuming that the educated class of Druggists will hereafter be incorporated by an act of the Legislature as a body exclusively licensed to deal in poisons, this is no reason why some attempt should not, in the mean time, be made to prevent an unnecessary sacrifice of life.

THE WEEK.

IN a letter addressed to Dr. David MacLagan and Dr. Andrew Wood, the respective Presidents of the College of Physicians and the College of Surgeons of Edinburgh, published by Mr. William Brown, a Fellow of the latter College, this gentleman recommends a fusion of the two Colleges into one general body of Medical Practitioners, and the entire abolition of the distinctive titles of Physician and Surgeon. Mr. Brown's arguments are quite just in the abstract, and are probably well adapted to the Medical atmosphere of Edinburgh, where the distinctions can hardly be said really to exist, the members of the two Colleges and the Graduates of the University alike practising all the branches of the Profession, with some few exceptions of certain eminent men who strictly confine themselves to their respective departments. It is perfectly true that Medicine as a science and an art is one and indivisible, and that the studies of the Physician and Surgeon are identical; but the spread of information and the increase of population and wealth favour the subdivision of labour, and as a matter of convenience here in England, the public wants demand the services of men each skilled in their own department. At any rate, whatever favour Mr. Brown's propositions may meet with in Edinburgh, for which locality alone he professes to legislate, they would certainly meet with little support from the Profession or the public in this country, where the different Colleges have enough work upon their hands in promoting and encouraging the proficiency of their members in their several departments of Medical and Surgical science.

Some gossip has been heard as to the prevention of the practice of an English Physician in Switzerland. It appears that, according to the Sanitary Act of the canton de Vaud, no one is permitted to practise medicine in the Canton without a licence, except in the case of medical men "regularly licensed in foreign countries and distinguished by their practice," who easily obtain the necessary authority from the Board of Health. A Physician who refused to accept this favour, and insisted on an examination, was rejected, and there has been some talk among English residents in Switzerland in consequence. One of the members of the Board of Health has stated as the grounds of rejection that the candidate did not know how to prepare calomel; that he said mustard was the only emetic he ever troubled himself about; gave similar answers to other questions; and, when taken to the bedside of a patient, "showed himself deplorably ignorant," pronouncing a case of malignant disease of the ribs and sternum to be aneurism of the aorta. So far from blaming the Board of Health of Lausanne, we believe it would be a fortunate thing for the people of this country if foreign physicians were examined by one of our public bodies before they are permitted to practise. We should have fewer "pathists" if this were the case.

Mr. Robert Chambers has given some interesting particulars respecting the American lady, Miss Dix, whose exertions led

(a) See the case of the Rev. Dr. Alexander in our Journal for April 18, 1857, p. 388. The head of the family was poisoned by arsenic, sold by a grocer in mistake for arrow-root. Three other members of the family had a narrow escape. The *Times* of June 4 contained the report of a case in which a child was killed by arsenic being sold in a Druggist's shop by mistake for sugar of lead and this sugar of lead was to be used as hair powder, or powder for an infant!

to the appointment of the Royal Commission on Scottish Lunatic Asylums—"Originally a teacher at Boston, this remarkable person no sooner became possessed of a small independency than she devoted herself to the improvement of the condition of lunatics in her own country. It will scarcely be credited, yet I am assured it is strictly true, that Miss Dix has been the means of inducing 19 of the American local Legislatures to erect and endow State Lunatic asylums. Of such weakly constitution that she can scarcely walk half a mile at a time, she has travelled over the whole States, seeking to do good in this way, often in the south-western States encountering the most serious dangers to life, constantly submitting to the greatest personal discomforts. Having come to Scotland at the beginning of 1855, she made all possible exertions to obtain admission to the private asylums in which many of these wretched creatures were kept; but, not succeeding in getting official aid, she could only learn enough to fix a strong suspicion in her mind that bad arrangements, cruelty, and neglect existed to a dreadful extent. She then proceeded to London, with an introduction to the Duke of Argyll and one or two other Ministers, to make representations on the subject; when such was her energy that she drove direct from the railway station to the residences of these persons, and actually, before changing her dress or even entering a lodging, had succeeded in obtaining a promise that a commission should be appointed. Miss Dix has since returned to her own country, and it is in the midst of continued usefulness in the same field there that she will hear how the British House of Commons has thrilled with the recital for which she was the means of furnishing the materials." Well may Mr. Chambers say—"I cannot but meanwhile accept it as a great discredit to my native country, not merely that such evils existed in it, but that their existence was overlooked by her clergy, her officials, and her philanthropists, and left to be detected and brought to light by a fragile woman—an American by birth, a Unitarian in creed—a person wholly without local influence, and who could have no motive for interference beyond the promptings of a noble benevolence."

The Report of the Scottish Lunacy Commission has already led to the introduction of a Bill to remedy the existing abuses. Its provisions will be found in our columns of Parliamentary Intelligence. We trust that, as the Bill passes through committee, the Medical element in the new Commission will be strengthened. It is quite impossible that the work of Medical supervision can be well done by so small a staff as is proposed by the Lord Advocate.

The first and last acts of the promoters of Mr. Headlam's Bill have been alike suicidal. They concocted it in secret conclave, and attempted to get it passed without the assistance of the Press in discussing its merits and mistakes before the general body of the Profession. At the interview with Lord Palmerston this week the general Press was excluded, but we believe none of the Medical journals thought it worth while to send a reporter. We have given an account, however, of what took place, not because anything very striking was said, but because the views of so many of the Corporation were brought before Lord Palmerston. The failure of Mr. Headlam's Bill will not be without its good effect if it impress on those who constitute themselves "Heads of the Profession" the lesson, that it is only by free discussion and the support of the Fourth Estate that they can hope to frame any Bill at all likely to meet with general support from the Profession, the House of Commons, or the Country.

Our readers will find among our Parliamentary Intelligence a full account of successive discussions in the House of Com-

mons upon the Netley Hospital. As all the documents relating to this building will soon be before the public, we need only say that we feel confident they will bear out most fully all we have said as to the excellence of the site, and of the general plan as modified by Dr. Smith. A very influential daily contemporary has suggested that Chelsea would be a better site than Netley for a great Military Hospital; and it might be in some particulars; but it must be remembered that Netley Hospital was designed for invalids arriving from abroad, and the site was selected as most convenient for their landing. Any one who will visit the spot will see that it is a lovely situation, and will find that the inhabitants of neighbouring villages enjoy excellent health. The preference of the Thames mud banks at Chelsea to the sea-weed covered beach at Netley is really too preposterous to need reply.

Some recent proceedings at Hull, with regard to Dr. Horner's position at the Infirmary, are of considerable Professional interest. It appears that Dr. Horner had announced an entire change in his Medical opinions, and has requested that separate wards might be given over to him in order that he might treat patients on homœopathic principles. This led to a resolution of the Weekly Board, that the request could not be complied with, and a protest from the other Medical officers, with a request that Dr. Horner would resign. Dr. Horner refused to resign, and a Special General Board was called to consider and determine Dr. Horner's position in relation to the Hospital. After a long discussion, in which the clergy took an active part on the side of legitimate medicine, Dr. Horner tendered his resignation, which was accepted, and the meeting was terminated by a vote of thanks to him for his past services at the Infirmary. We congratulate the other Medical officers on their success in clearing the Hull Infirmary from the stain of the homœopathic absurdity.

A meeting on a very important educational question took place at University College on Wednesday, to consider certain apprehended alterations in the constitution of the University of London, intended to dispense with the necessity of candidates for degrees in arts and laws having been educated in an institution affiliated to the University. It was urged on the one hand that the proposed alterations would be injurious to the cause of regular and systematic education, lowering the value and altering the meaning of an English University degree, and that mere examination was a very imperfect test of a man's learning. On the other side it was argued that University College should assist in meeting the exigencies of the times as regards education, and grant degrees, even if the necessary literary and scientific education had been obtained elsewhere than in colleges. The advocates of the collegiate system carried the day by a large majority.

We understand that the Petition of the Poor-law Medical officers, lately agreed upon at the large meeting at the Freemasons' Tavern, has been forwarded by Mr. Griffin to the House of Commons. It received, on that occasion, the signatures of 191 gentlemen, 114 of whom were Union Medical officers, and of the latter 93 were resident in various parts of the kingdom. Some of those who attended the meeting came from great distances for the express purpose of demonstrating their sympathy with their professional brethren, and one gentleman travelled nearly 300 miles, thus exhibiting a remarkable contrast to the apathy of the Metropolitan Union officers, of whom we regret to hear that only 21 could find leisure to attend. A Report of the meeting has been sent to every Member of the House of Commons, and also to every Poor-law Medical officer; and to all who have joined the

Association, an abbreviated form of Petition has been forwarded. It is hoped that the members of the Association will not only sign this Petition themselves, but will persuade their colleagues to do the same, and send it as soon as possible to the House of Commons. Petitions have not been sent to non-subscribers, nor to those who signed the Petition at the meeting, but any gentlemen who desire to possess this document, may receive it on application to Mr. Griffin. We also learn that this indefatigable advocate of the cause of the Poor-law Medical officers has memorialized the Council of the Royal College of Surgeons and the executive of the London Apothecaries' Society, praying those bodies to petition in favour of Poor-law Medical Reform, and we trust that they will see the necessity of bestirring themselves in a cause which so deeply involves the interests of a great number of the general Practitioners of this country. Mr. Griffin has also written to the Poor-law Board, inclosing a copy of the Petition, and reminding the Board that although a promise was made last year to take the various memorials presented to it "into consideration," yet that no steps whatever have yet been taken. Mr. Griffin attributes this apparent neglect to the feeling on the part of the Board, that it requires its hands to be strengthened by the authority of the Legislature; and he hopes that, encouraged by the petitions of the Poor-law Surgeons, and backed by the House of Commons, some measure of Poor-law Medical Reform will meet with success. These exertions of Mr. Griffin and the Poor-law Medical officers have not been without effect. The Poor-law Board in a general order dated 6th June, 1857, and transmitted to the Guardians throughout the country, which will come into operation on the 24th day of June, have directed that every Medical Officer of the Workhouse, duly qualified when appointed, is to hold his office during his life, or until he resign, or become insane, or legally disqualified to hold it, or be removed by the Poor-law Board. The District Medical Officer, who, being duly qualified at the time of his appointment, is either then resident within his district, or becomes so within two months afterwards, will continue to hold his office for the same period as the Workhouse Medical Officer, unless he cease to reside within his district, when his office will determine. Other arrangements are made as to residence within the districts, and the qualifications of Medical Officers, which will, doubtless, be acceptable to the Profession.

REVIEWS.

Essays from the Edinburgh and Quarterly Reviews, with Addresses and other Pieces. By Sir JOHN F. W. HERSCHEL, Bart., K. H., etc. London: 1857. 8vo.

THESE essays and addresses of Sir John Herschel are not mere chronicles of the progress of the science with which his name is indissolubly connected. The highest truths of this science are simply and beautifully expounded, and made clear to all classes. Very many of our readers are active members of general book clubs, and we can assure them that it would be difficult to find a work so likely to be both instructive, interesting and generally acceptable as this collection of Sir John Herschel's essays and addresses.

The Beautiful Islets of Britaine. By W. C. DENDY. London 1857. Small 8vo. Pp. 151.

Mr. Dendy adds a final *e* to Britain. But we shall not quarrel with him for this, merely translate him, and say that the Isle of Wight, the Isle of Man, the Scilly Isles, Anglesey, and some smaller isles, are the "Beautiful Islets of Britaine," in which he points out "where the beautiful may be found." His little book will be a pleasant and useful companion to those who propose to pass their holiday time "among the wilds of the isolated rocks on the waters of Britain," or wish to enjoy an element of the beautiful in which our country is pre-eminent, "the pure rich green of its blossomed meadows and its leaf-loaded forests."

The English Bread-Book for Domestic Use. By ELIZA ACTON.
London: 1857. Small 8vo. Pp. 204.

A very useful little book for Paterfamilias. It contains plain and minute instructions for making good bread, receipts for different varieties of bread and plain cakes, notices of adulterations and their effects, and accounts of improved baking processes and institutions established abroad. It appears that the use of the kneader and oven of M. Lesobre is likely to be attended with remarkable advantages. The Rolland Kneader is quite replacing the manual labour of bread-making in Paris. It is high time that it did so in London, and we trust this *Bread-Book* will assist in improving the manufacture both of household bread and baking bread in this country, and do something towards removing the absurd disproportion between the price of wheat and that of bread.

Biographies of Distinguished Men. By FRANÇOIS ARAGO, Member of the Institute. London: 1857. 8vo. Pp. 607. THE present volume is one of a series of English translations of the works of Arago by Admiral Smyth, the Rev. Baden Powell, and Mr. Robert Grant. It consists of Arago's own Autobiography, and a selection from his Memoirs of eminent continental and British scientific men:—Herschel, Bailly, Laplace, Fourier, Carnot, Malus, Fresnel, Young, and Watt. These memoirs will be read with great interest, not only because they contain a popular account of the progress of physical science during the past half century, but personal histories of the eminent men whose discoveries have led to that progress, and curious accounts of the internal economy of the French Academy.

The translators have not been satisfied with mere translation, but have added notes and commentaries on obscure points in the text, and have occasionally criticised the views and theories of Arago, sometimes even arriving at different conclusions as to the relative merits of men of science. They have thus produced a work which must stand in the first class of the scientific biographies of the nineteenth century.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON THE PROPHYLACTIC EFFECTS OF BELLADONNA IN SCARLATINA.

By Dr. MORRIS.

As a slight contribution to this *quæstio vexata*, Dr. Morris furnishes an account of some observations he made at the Foster Home Orphan Asylum, near Philadelphia. The number of children who were liable to Scarlatina, on December 25, 1856, was as follows:—

Sickened up to Feb. 20	.	.	.	35
Stated not to have had it	.	.	.	14
				—
				49
Taken sick Dec. 27 and 28	.	.	.	6
				—
				43

		Escaped.	Had Scarl.
Took no belladonna	24	6	18
Took belladonna	19	8	11
Had scarl. in December	6	..	6
	—	—	—
	49	14	35

The administration of the belladonna was commenced December 29, and continued to February 20, a drop of Hufeland's mixture (ext. bell. gr. iii., aq. $\frac{3}{2}$, alcoh. $\frac{5}{2}$.) for each year of the child's age being given night and morning. The effects produced were generally slight, consisting in a little dryness and redness of the fauces, and dilatation of the pupil, with occasionally a little headache. Of the 11 children who sickened while using the belladonna, 2 did so on the sixth day, 1 on the eighth, tenth, and fifteenth days respectively, 2 on the seventeenth, and 1 each on the fortieth, forty-first, and forty-second day.

If the figures are reduced to a per-centage, we find 75 per cent. of the unprotected children seized, while only 53 per

cent. of the protected were so. The period of incubation was also prolonged; for, while the last case of the 24, in which no belladonna was given, occurred on January 12, the last of the belladonna cases occurred on February 9. "I think the explanation is, that the belladonna acted by preventing to some extent the absorption of the scarlatina miasm. We know that the process of absorption depends to a great extent on the movement of the blood in the blood-vessels; the slower this movement, and the fuller the blood-vessels, the less the absorption. Hence the effect of narcotics would be to diminish absorption." As to the point, whether belladonna should be given generally to all who are exposed to the influence of scarlatina, Dr. Morris observes, that it is not such a trifle as it has been represented to be, to maintain even a slight narcotic impression for a month or six weeks, which would have to be repeated on the occasion of every fresh exposure; yet, where an epidemic is very malignant, or where hereditary fatality attends the disease in a family, he would recommend its employment, as tending to diminish the risk of contracting the disease.—*American Journal of Medical Science*, April, p. 335.

EXCERPTA MINORA.

Glycerine in Vaginitis.—M. Demarquay reported to the Medical Society the advantage he continues to derive from dressing wounds and ulcers with glycerine, their surfaces cleansing and cicatrising rapidly under its use. If it occasion pain it has been badly prepared, still containing some sulphuric acid. He also finds it highly useful in vaginitis, even chronic obstinate cases rapidly yielding. A layer of it must, however, be left in contact with the parts, and to this end 3 or 4 plugs of charpie, soaked in 100 parts of glycerine, with 20 of tannin, should be introduced into the vagina every 24 hours, washing out the mucous membrane first with a decoction of walnut leaves and alum. M. Pioget stated that he had long been in the habit of introducing plugs of cotton, having a little tannin in the centre, and then throwing in the decoction of walnut leaves. In this way the injection penetrates the plugs, takes up the tannin, and brings it in contact with the mucous membrane, without the necessity of removing the plugs.—*Union Méd.* No. 57.

Extraordinary Monomania.—M. Larivière relates a case which he believes unique, which has recently come before the court of Briançon. A man, aged 27, usually believed to be of weak intellect, and a great liar and dissimulator, was convicted of having torn open the abdomen of many live sheep with his teeth, and then eviscerating the animals. He killed as many as 13 in this way in 4 or 5 months, and 5 in the same night. No motive could be assigned for the acts, and M. Larivière pronounced it a case of pure monomania. The court sentenced him to 6 months' imprisonment.—*Union Méd.* No. 59.

Traumatic Diabetes.—Dr. Itzigsohn relates the case of a smith, aged 38, who, immediately after a blow upon the crown of the head, was seized with frequent desire to void his urine, which he did with great difficulty. After this, diabetes gradually became developed, and his thirst was so great that he often drank several gallons daily. At a later period, affection of the liver was indicated by the yellow conjunctivæ and tenderness in the hypochondriacal region.—*Virchow Archiv.* Band xi. p. 394.

Sensibility of Tendons, Ligaments, and the Dura Mater.—M. Flourens has recently communicated the results of a series of experiments to the *Académie des Sciences*, for the purpose of proving what we had believed was a generally admitted fact, viz., that while certain parts, such as tendons, ligaments, the dura mater and periosteum, are quite insensible in their normal state, they become acutely sensible when they are the subjects of irritation or inflammatory processes.—*Comptes Rendus*, tome xlv. No. 16.

Prophylaxis in Puerperal Fever.—M. Piedagnel states that during a recent epidemic of puerperal fever in Paris, lying-in women were distributed over the various Hospitals, and many were sent to his wards at the Hotel-Dieu, where they were distributed among the other patients, occupying from a fourth to one-half the beds. He resolved to try a prophylactic treatment. To every lying-in woman as long as she continued in the Hospital was administered, morning and evening, 3 grains of quinine and 15 of subcarbonate of iron; and if any of the early signs of puerperal fever manifested themselves,

the quantity of the quinine was gradually increased to 8, 12, and even 18 grains *per diem*, and the iron to 60 and 90 grains, diminishing the doses as the symptoms disappeared. Among 91 women who were delivered only 1 died of puerperal fever, contracted since her admission. — *Comptes Rendus*, tome xliii. No. 21.

PROVINCIAL CORRESPONDENCE.

IRELAND.

[From our Dublin Correspondent.]

DUBLIN, June 8, 1857.

THE annual meeting of the Medical Benevolent Fund Society of Ireland was held on Monday, June 1st, in the College of Surgeons, Dr. Williams, President of the College, in the chair. A falling off, which it is to be hoped will prove but temporary, had taken place in every part of the income except that which may be said to be of a permanent nature. Dr. Fleetwood Churchill, one of the honorary secretaries, read the fifteenth annual report. Notwithstanding the falling off in the income, and an increase in the number of applications, the Committee had not found it necessary to diminish the amount of the grants individually. A letter was read from Mr. Bewley, of the firm of Bewley and Evans, inclosing a donation of £100. The applications were 74 in number, of which 23 were new cases. The 74 applications comprised 227 persons; 6 Medical practitioners, 176 children of Medical men, of whom 21 were orphans, and 45 widows. The Committee, in the exercise of the discretion allowed them, thought it right, in a few cases of urgent distress, to afford immediate aid by grants, without waiting for the annual meeting, which was distant at the time the applications were made.

The fifth annual meeting of the Irish Medical Association was held on the following day in the same institution, when the chair was taken by Dr. Kingsley, of Roscrea. Certain changes in the Medical Charities' Act were enumerated in the report of the Council as desiderata, the principal objects being to secure permanency of office, to obtain a legal right to payment for extraordinary services, to procure an amendment of the clause which obliges Dispensary Medical Officers to vaccinate gratuitously all applicants without distinction; to protect Medical Officers of Dispensaries against persons in comfortable circumstances procuring tickets; and lastly, to establish a claim to superannuation pensions. The necessity of prohibiting, so far as possible, disreputable and dishonourable practices, such as accepting degrading tenders with the effect of displacing professional brethren from office (a subject on which Mr. Nicholls of this city has recently addressed you in an excellent, temperate, and useful letter) was also urged in the Report. Resolutions, that the Association were of opinion that £100 a year should be fixed by law as the minimum salary of any man in charge of a Medical district, and expressive of their warm concurrence in Mr. Headlam's Medical Profession Bill, were subsequently passed.

The last evening scientific meeting for the hundred and twenty-seventh annual session of the Royal Dublin Society took place at their house on Saturday, June 6. Two very short papers were read, the Lord Justice of Appeal, V.P., in the Chair, after which the evening was spent less formally in a conversation, and profitably in the study of the numerous objects of interest from the Society's Museum, and from their beautiful botanic garden at Glasnevin, with which the rooms were crowded. The Society's new museum, a chaste and elegant building, the principal room in which is 200 feet in length, is rapidly approaching completion, and it is intended to receive the British Association at a soirée in this magnificent apartment, during their visit to Dublin in August next. The Society, ever active and energetic in the departments over which they preside, have recently sanctioned a most important step,—the formation of a class for the practice of analytical chemistry in its relation to agriculture, which is to be under the able direction of Dr. E. W. Davy, and to be

conducted in conjunction with the courses of lectures delivered in the Society's theatre by his father, Professor Davy. Prizes are to be distributed at the termination of the course. A large table of elaborate construction has been erected in the laboratory, in order that every facility for manipulation may be afforded to a large number of students, all of whom will be supplied with the most approved apparatus. Already a considerable number of young men have enrolled themselves under Dr. Davy, and it is anticipated that next session the number will be much increased, and a new means of livelihood opened to the pupils, who, with a diploma of competency from the Society, may be enabled to offer their services as chemical, as well as practical agriculturalists.

The Medical and Surgical sciences (Queen's University, Ireland) Bill, prepared and brought into the House of Commons by Mr. Fagan and Mr. Beamish, provides that it shall be competent for the ratepayers of the three Poor-law Unions of Cork, Belfast, or Galway respectively, to assess themselves for the providing "one General Hospital for the treatment of surgical cases, and of all cases of acute disease, fever excepted, such Hospital not to contain less than 100 beds for intern patients," where clinical lectures shall be given, to which the Students of Medicine and Surgery of the Queen's Colleges, or other Medical and Surgical students shall have access, on payment of such reasonable fees as the Lord-Lieutenant may approve, and certificates of attendance, which shall be received by all licensing bodies. It is, of course, most desirable that the large Hospitals of provincial towns should be made available for clinical instruction; but in effecting this end care ought to be taken not to connect particular Hospitals too specially with educational institutions, an example of the disadvantage of which is presented in the case of Sir Patrick Dun's Hospital in Dublin, attendance on the latter institution being by Act of Parliament compulsory on all candidates for the degree of Bachelor of Medicine in the University of Dublin, a regulation which has long been universally admitted to be most objectionable. It does not, however, appear that the creation of such a monopoly is contemplated by the framers of Mr. Fagan's Bill, as the measure contains nothing to prevent a second Hospital, should such hereafter spring up in any of the towns abovementioned, being also recognised by the Queen's University. But should the Bill pass into law, its enactment will be another step in the process of bringing the Medical Profession under Poor-law administration, and a very probable effect of it will be ultimately to throw the remaining Infirmarys of the country upon the rates. I may also observe, that it appears strange to exclude fever from an Hospital intended for complete clinical instruction, and I should think it will be found necessary to modify the clause having that effect.

Several deputations left Dublin for London this day, in reference to the Medical Profession Bills at present before Parliament, from the Colleges of Physicians and Surgeons and the University of Dublin, in support of Mr. Headlam's Bill, and from the Apothecaries' Company and the Association of General Medical Practitioners, in favour of that introduced by Lord Elcho. I understand that the Queen's University gave a modified support to the latter measure.

GENERAL CORRESPONDENCE.

THE MEDICAL SCIENCES BILL.

[To the Editor of the Medical Times and Gazette.]

SIR,—Feeling assured that every scientific journal must advocate progress, in whatever direction, I address myself to you on the subject of Mr. Fagan's Medical and Surgical Sciences Bill. This Bill has been brought forward in order to render complete the course of Medical Education afforded by the Queen's Colleges in Ireland; as well as to afford a more extended and certain hospital relief for the poor. Its provisions may be classed under two heads, viz., the affording facilities and means for practical study to the students of the said Colleges, and the placing institutions created or modified for that purpose on a fixed and permanent basis. Now the

first question which arises is this—Was it necessary that such an extended source of practical clinical instruction should be opened to the students of these Colleges? In order to answer this we must consider the aim, the object of the Queen's Colleges in Ireland. That aim, that object was to decentralize instruction, to enable men of real ability, but moderate means, to acquire knowledge, and cultivate science. This object, without the opportunities afforded, they would be ever unable to achieve. Now I have spent many years in the Medical schools of Germany, France, Prussia, Austria, and Italy, and have especially endeavoured to discover the source of that great reputation which so many seemingly insignificant Universities have obtained throughout Europe. Many circumstances may have favoured one or the other; but wherever medicine was concerned there was one invariable qualification, one undeviating magnet—well-conducted clinical instruction. This has been intuitively seen by Mr. Fagan; he has perceived that without this the Queen's Colleges would be barren and fruitless; and hence he has endeavoured to raise them to the standard of colleges and schools abroad, naturally of much less pretensions. Würzburg, with its 28,000 inhabitants, sees some 200 students of Medical science flock yearly to its University halls; and that from every country in Europe. Whence does this arise? From its world-known Julius-Hospital, and its clinical teaching. Heidelberg, with 17,000, has over 700 students, of whom 150 devote themselves to medicine. Bonn, with 17,000, has over 1000 students, 200 of whom are Medical. And all this solely owing to the opportunities afforded for acquiring practical knowledge at the bedside of the patient, and to the scientific character of their clinical professors. Why, then, should not Cork, with its 100,000, Galway, with its 60,000, Belfast, with its 80,000 inhabitants, attract a proportionate number of students, were their schools but placed on a similar practical footing? To do so, to render the Queen's Colleges not only *local* sources of benefit to the surrounding population, but also nurseries of science for Europe and the world, landmarks of Medical progress, which would prepare accomplished Physicians for the present and distinguished discoverers for the future; to effect this, I repeat, is the object of the Bill. Mr. Fagan has justly foreseen that a permanent and fixed income is absolutely necessary, on the one hand, to provide a sufficient number of patients with hospital accommodation, on the other, to supply all the necessities of proper clinical instruction. That such a scheme, large, progressive, and enlightened, should meet with opposition on the part of ignorant monopolists, or bigotted opponents of anything tending to the advancement of mankind, is perfectly natural; but, Sir, I trust that you, as conductor of a scientific and progressive journal, will join with every true lover of science and progress in advocating the cause of Mr. Fagan, and of his Bill, the sole object of which is, as I hope to have clearly shown, to confer a benefit on science and humanity. I trust that you will give your aid to promote this, the first practical endeavour to place our country on a similar footing with continental Europe; with this endeavour, I say, to develop the real talent and ability of men at home, and above all, to attract students from abroad; instead of allowing our searchers after knowledge to leave their country in pursuit of that which lies at their own doors, were but the encouragement and opportunities which this Bill affords vouchsafed. I am, &c.

G. PURCELL O'LEARY, A.M., M.D., Ireland.

9, Sidney-place, Cork, June 2.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 26, 1857.

Sir CHARLES LOCOCK, Bart., President, in the chair.

(Concluded from page 579.)

A case of Intense and Long-continued Photophobia and Blepharospasm, lasting sixteen months, relieved by the Inhalation of Chloroform, administered seven times, by Wil-

liam Mackenzie, M.D., Surgeon to the Eye Infirmary, Glasgow, was next read.

The PRESIDENT referred to a case in the Middlesex Hospital mentioned to him by Mr. Arnott, in which chloroform was administered to a patient suffering from great intolerance of light, and gave not only immediate but permanent relief.

Mr. ARNOTT said it was a case of strumous ophthalmia with intolerance of light. In these cases chloroform was very useful, enabling the surgeon to obtain a good view of the cornea. The peculiarity of the case mentioned by the author was the length of time (sixteen months) during which the disease existed previous to its treatment by chloroform.

Dr. SNOW thought Dr. Mackenzie was right in attributing the benefit of the chloroform to its effects on the sentient nerves, and not to any direct influence on the motor nerves or muscles. The cure was a very fortunate one, and could hardly have been expected. Chloroform was a palliative, affording immediate relief in all cases of excessive sensibility, but in many cases the medical man had to look to tonics and other remedies for a permanent cure. In 1848 he saw a patient in St. George's Hospital suffering from inflammation of the eyes and great intolerance of light. The latter symptom was completely removed by the inhalation of sulphuric ether, which he wished also to try as a remedy for the inflammation, but the patient left, and would not submit to the treatment. Dr. Richardson had used sulphuric ether vapour with good effect in a case of inflammatory croup.

A paper, by Dr. EDWARD SMITH, was then read, on

THE INFLUENCE OF THE LABOUR OF THE TREAD-WHEEL OVER RESPIRATION AND PULSATION, AND ITS RELATION TO THE WASTE OF THE SYSTEM, AND THE DIETARY OF THE PRISONERS.

This investigation is a part of the series of inquiries which the author has prosecuted, the general results of which have been presented to the Royal Society. The aim is to show how great is the wear of system caused by this mode of punishment, the inequality of the punishment, and the serious defect in the quantity of respiratory food supplied to the prisoners. The inquiries were made by the author on his own person in October, 1856, at the Coldbath-fields prison, by the courtesy of Mr. Pownall and other Middlesex magistrates. He worked the wheel during periods of a quarter of an hour each, with intervening periods of rest of a quarter of an hour, in the manner prescribed for the prisoners, and made seven series of observations. The average quantity of air breathed during the labour was 2500 c.i. [cubic inches] per minute, at a rate of respiration of $25\frac{1}{2}$ per minute, and a depth of respiration varying from $91\frac{1}{2}$ c. i. to $107\frac{1}{2}$ c. i. The rate of pulsation varied from 150 to 172 per minute. During the intervals of rest he sat quietly, and after 13 minutes' rest the rate of respiration varied from 15 to $18\frac{1}{2}$ per minute, the quantity of air respired from 725 c. i. to 980 c. i., the depth from 48 c. i. to 53 c. i., and the rate of pulsation from 97 to 120 per minute. Before he entered upon the inquiry, he breathed in the standing posture about 600 c. i. per minute, at a rate of 14 per minute, and a depth of 43 c. i., and the rate of pulsation was 75 per minute. Thus, during the exertion the quantity of air inspired was increased more than fourfold, the rate of respiration was increased $\frac{2}{3}$ ds, the depth of inspiration $2\frac{1}{2}$ times, and the rate of pulsation $2\frac{1}{2}$ times. The returns during the period of rest show that the effects of the labour had not passed away in a quarter of an hour. Compared with the results in the quiet sitting posture, the author stated that the effect on the respiration was $5\frac{1}{2}$ times, and on pulsation $2\frac{1}{2}$ times as great; and taking together the $3\frac{3}{4}$ hours of hard labour with a similar period of rest, he proved that the effect upon the system of the 8 hours' labour was equal to that of 24 hours of those not condemned to hard labour; and that, if the whole 24 hours were taken together, the effect would probably be two-thirds greater than that of occupations not laborious. He then contrasted these results with others which he had obtained for the purposes of comparison. Thus fast walking at upwards of 4 miles per hour caused a rate of respiration of

Dr. WEBSTER dissented from the conclusions of the author respecting the effect of the treadmill on the health of the prisoners. Persons of weak health, he said, were often benefited by the prison discipline, and the mortality in most of the London prisons was exceedingly low. The total deaths in all the London gaols during last year amounted to 81, which was a small mortality, considering there were always upwards of 6000 inmates within these receptacles, of whom a large proportion were males: while, as frequent changes of prisoners also occurred, the aggregate numbers have become much augmented. The diet, too, of the prisoners was often much better than they were accustomed to when out of prison, with the exception of those who were imprisoned for seven days, and whose fare was only bread and water. Some of the injurious results attendant upon prison life were merely the moral effects of confinement; while others were attributable to the improper method of heating the prisons with warm air.

Dr. SNOW said the author ought not to take it for granted that the quantity of oxygen consumed always bore a definite proportion to the quantity inspired. Under the circumstances mentioned by Dr. Smith there would doubtless be some increased consumption; but under other circumstances (as after the use of narcotics) the reverse might be the case. Nor was it certain that an increase in the respiratory elements of food was required by the prisoners so much as an increase in that which would furnish muscular tissue, such as mutton and beef, especially the latter, which was consumed in large quantities by navigators.

Dr. MARKHAM thought it would have been better if the practical results, as shown by the reports of the medical officers, had been laid before the members, rather than the theoretical conclusions of the author.

Mr. SPENCER WELLS referred to a statement made by Captain Chesterton, in his "Revelations of Prison Life," that the health of the prisoners, when the treadmill was first brought into use by Mr. Cubitt, suffered from the period of labour being too protracted, but that since the period of toil had been shortened the work proved beneficial to the system; and this was the general opinion of those who had opportunities of judging. The punishment, in military prisons, of lifting shot was also found to benefit the men, if not carried to excess.

Dr. WEBSTER said the prisoners often worked in a close atmosphere, which was, of course, prejudicial to health.

Dr. STEWART said there could be no doubt that after a short training, the labour at the treadmill, like all others, would become less severe, so that the effects produced on the author, who was not accustomed to the exercise, could not be regarded as trustworthy.

Dr. O'CONNOR said he was informed by the governor of one of the Dublin prisons, that the work was beneficial to the prisoners, their health generally improving under the exercise.

Dr. SMITH, in reply, referred to the reprobation of the treadmill by Mr. Mayhew, in his "Great World of London." No doubt, he said, the results which he (Dr. Smith) had mentioned were subject to some deduction for want of training, though he was strong and healthy, accustomed to long walking, and experienced in the use of the spirometer, and many persons would be less capable of bearing the fatigue than himself. He wished the experiments to be taken for what they were worth.

MEDICAL REFORM.

DEPUTATION TO LORD PALMERSTON IN SUPPORT OF MR. HEADLAM'S BILL.

THE representatives of the Press were refused admission to Cambridge House, on Tuesday. For the following report of the interview, the Profession and the public are indebted to one of the deputation.

Lord Palmerston received a deputation on Tuesday, at two o'clock, at Cambridge-house, of members of the medical profession, representing the colleges of physicians and surgeons of the United Kingdom, the universities of Oxford and Dublin, and the various classes of the profession, on the subject of the medical bills now before the House of Commons.

The deputation consisted of Dr. Mayo, Dr. Alderson, Dr.

Burrows, Dr. Hawkins, Mr. Travers, Mr. Green, Mr. Stanley, Mr. Lawrence, Mr. Caesar Hawkins, Dr. Acland, professor of medicine in the University of Oxford; Dr. Neligan, senior censor, King and Queen's College of Physicians, Dublin; Dr. Harrison, professor of anatomy, physiology and surgery, University of Dublin; Dr. Hans Irvine, president of the Royal College of Surgeons of Ireland; Dr. Williams; Dr. Wood, president of the Royal College of Surgeons of Edinburgh; Dr. Gardnier, extra academical professor, Edinburgh; Dr. Watson, Faculty of Physicians and Surgeons of Glasgow; Dr. Wynter; Dr. O'Connor; Mr. De Grave, master, and Mr. Simeon, warden, of the Society of Apothecaries; Mr. Tegart, chairman of the Court of Examiners of the Society of Apothecaries, London. The deputation was accompanied by Colonel Sir H. Verner, M.P., Sir W. Heathcote, Bart., M.P., Sir Richard Levinge, Bart., M.P., Mr. Headlam, M.P., Mr. Neate, M.P., Mr. F. Gore Langton, M.P., Mr. Hatchell, M.P., Colonel Freestun, M.P., Mr. P. Bennett, M.P., Mr. Grogan, M.P., Mr. Daniel O'Connell, M.P., Mr. Frank Crossley, M.P., Mr. Somers, M.P., Mr. P. O'Brien, M.P., Mr. McCann, M.P., Mr. Macartney, M.P., Mr. Fagan, M.P., Mr. Osman Ricardo, M.P. for Worcester, &c.

Mr. HEADLAM, in introducing the deputation said that, as his lordship was aware, the subject of medical reform had been a very long time before the country, and there was a conviction that the time had arrived when it ought to be finally settled without regard to any other interest than the public good. The members of the profession, as well as the different medical institutions throughout the United Kingdom, had agreed to the principles of a bill, and in doing so had made great concessions. The different medical bodies throughout the country had approved of the bill which he had introduced to the House of Commons. They do not complain of the Government not taking it up, but they think it a measure fully entitled to the support of the Government, being one suited for all purposes as far as regards good medical government and the protection and requirements of the public; therefore it was that he felt warranted in not only asking in their behalf for the support of the Government to secure the second reading, but also their aid in passing it through the house with all just speed, and not think of referring it to a select committee or anything of that kind. The deputation which he had the honour of introducing to his lordship did not object to any reasonable alteration of the details of the bill, but they could not and would not consent to any deviation or departure from the substantial parts of the bill. Mr. Headlam said that Dr. MacLagan, the president of the Royal College of Physicians of Edinburgh, was not present; he sent a letter to Dr. Hawkins, apologizing for his unavoidable absence, and stated that the College over which he presides is favourable to the bill, in support of which they had waited upon his lordship.

Dr. MAYO stated that formerly on a deputation waiting on Sir George Grey, as well as in an interview with his lordship, they were told that the Government would give support to a bill emanating from the profession, if sufficient unanimity existed among its members. Such unanimity existed at present to as high a degree as could be expected; and it was with some surprise, this being the case, that they found another bill brought forward in competition with their own, introduced by Mr. Headlam. It must be supposed that some suspicion existed that the promoters of the bill of Mr. Headlam did not favour the cause of medical reform; whereas the college had itself within the last twenty years taken the greatest possible pains to improve their own constitution, particularly in throwing open their fellowships, and in raising the character of their examinations. The promoters of the bill, it must be observed, were at least eminently disinterested; for Lord Elcho's bill, by a single examination, pitched at a low standard for particular purposes, would raise the importance and dignity of the existing physicians who had passed through higher examinations, which would be superseded by the one standard proposed by Lord Elcho. He reminded his lordship of the saying of Burke—to compare small things with great—respecting the elevation gained by the nobility of Holland, when no further additions could be made to their numbers; and he spoke of the composition of Lord Elcho's council, out of nominees of the Crown, and not of the profession, as involving extensive ignorance of the requirements of the council, and as proceeding on the supposition that a man is a fool or a physician at forty.

Mr. GREEN, on behalf of the College of Surgeons, said that they were not opposed to legislation in a proper direction. That college had existed as the Royal College of Surgeons since 1800; and in 1843 its name was changed into the Royal College of Surgeons of England, by royal charter. It had important duties to discharge, for which it was appointed by the Crown. It consisted of a council, many of the members of which were now present. That council was, to a certain extent, elected, and thereby the principle of representation of the Fellows of the College by election was recognised and established. Some of the members of the council were elected from time to time, and liable not to be re-elected. They were governed by by-laws requiring the sanction of the Legislature and the Secretary of State; thereby establishing a security to the profession and the country through that supervision, and if any abuses crept in, it was owing to the neglect of the Secretary of State, and not of the council of the college. For a long time it was the recognised college of the country, and its membership was sought by all who profess to practise surgery in this country. Its membership was considered necessary for the public service, and in all acts of Parliament requiring surgeons in England the College of Surgeons is mentioned. It is owing to this that so many get a diploma. There were 500 diplomas granted last year. It did not derive its income from any other source, and it was expended on the college. It was stated that the offices of examiners were sinecures of £500.

Mr. STANLEY: It is only £300.

Mr. GREEN: The duties of examiners in discharge of their duty extends over four hours every week of each week in the year. The Hunterian Museum has been nearly quadrupled. When presented to the college there were only 10,500 preparations, and it now amounts to 39,880. The cost of the college, derivable from its revenue, exclusive of a few grants from Parliament, was £200,000 since its foundation. They were entitled to the confidence of the profession, which they had, and had strong claims on the support of the Government. It was true that there was, some years ago, some agitation regarding the College of Surgeons, but that had all subsided, and a better state of things exist. This Lord Elcho proposes to disturb. Now, if that gentleman would be guided by proper information, and sought it in the proper place, he would find, by reference to Mr. Warburton's committee, that the charges against the College of Surgeons were completely refuted. He defended the medical corporations, and referred to the medical press as confirmatory of the system of examinations. Some time ago there was a cry among the general practitioners, from a desire not to be connected with a trading company, to get a college of their own; but they did not seek to interfere with or destroy existing bodies like the bill of Lord Elcho,—whilst the bill of Mr. Headlam has in view to establish a proper council of inquiry as to the professional acquirements of all those entering the profession of medicine. It establishes uniformity of education and qualification to practise, with a complete registration of all duly-qualified medical men in the United Kingdom. Mr. Green entered at great length into a defence of the college, and said that a minimum standard of education for all persons entering the profession would have a prejudicial effect on the public and the profession.

Dr. WILLIAMS said, representing as he did, with his colleague, Dr. Irvine, the College of Surgeons of Ireland, and the surgical profession in that country, he felt bound, for the interest of the profession, and still more of the public, to represent the injurious effects Lord Elcho's bill would have. Speaking in the presence of the many Irish members of Parliament present, he could boldly say, and the assertion would be ratified with every one acquainted with Ireland, that the Irish College of Surgeons had discharged its duties to the great benefit of the public, and was a credit to the country. That Lord Elcho's bill, as had been shown by the previous speakers, confiscated the revenues, and annulled the privileges of that valuable institution. If doing so redounded to the advantage of the public, he (Dr. Williams) would be ashamed to advocate their maintenance; but as the bill of Lord Elcho would seriously endanger public interest, a measure of legislation which surely ignored the principles of representation and self-government was without a shadow of excuse. That Mr. Headlam's bill was a measure for the promotion and advancement of education, both general and professional, while Lord Elcho's bill fixed a minimum standard for the general

practitioner only. That from the necessity of the case a class of practitioners with a low amount of education only would be provided for the less wealthy portion of the community, but that very necessity rendered it more important to effectually provide for the more extended education of the higher classes of practitioners, of physicians and surgeons, not indeed for the sake of the rich class, but to ensure the scientific progress of medicine and surgery. That the bill would effectually attain that great object, and that on that account it was preferable in itself, and there was no pretext for enacting a measure confiscating the revenues and annulling rights secured by royal charter and acts of Parliament.

Lord PALMERSTON: All he could say of the bills now before Parliament was that he would give his attention to their provisions, and he would bear in mind the very important communications made to him by so many distinguished members of the profession of medicine. He could not say what course the Government would pursue; regarding the two bills, they would be guided by the discussion of their merits. He had no desire to support any other than the one which was satisfactory to the profession and for the public good. He was thankful for all he had heard.

Dr. BURROWS said Mr. Headlam's bill was supported by all the medical examining boards of the United Kingdom, except the Apothecaries Hall of Ireland. The bill of Lord Elcho had only the support of the Scotch Universities, which were not wholly medical.

Dr. HARRISON said that he had been requested by the board of the University of Dublin, to attend this meeting, and to express their approval generally of Mr. Headlam's bill. The University of Dublin took no part in this medical question in reference to the medical corporations; the only desire of the board was the improvement of medical education. They felt convinced that the improvement of medical science mainly depended on the foundation of a good general education, and therefore they were strongly of opinion that no medical degree should be conferred without a previous education and degree in arts in a university. The great obstacle to any improvement in medical education at present arose from the number of universities giving medical degrees without a previous education, and in arts in a university. If a young man can obtain a medical degree in one university without a degree in arts, it stands to reason that he will not resort to another, in which that previous expensive step is required. Mr. Headlam's bill insists that no man can be registered as a physician unless he has first obtained a degree in arts and a degree in medicine; it also requires a good general preliminary education for the other grades of the profession. As Lord Elcho's bill ignores all distinctions in the profession, it holds out no encouragement to pursue the higher grades or to adopt a university education; therefore, the board earnestly hope that your lordship will support Mr. Headlam's bill, and oppose that of Lord Elcho.

Mr. Crossley, M.P. and Dr. Acland rose to speak, but the former gave way.

Dr. ACLAND felt it his duty to say that he felt very strongly on the bills now before the House of Commons, and was surprised that a man of Lord Elcho's sagacity and ability should bring forward a bill of the kind that he is supporting, in opposition to that of Mr. Headlam. Some years ago he felt it his duty to represent to, and urge on the University of Oxford to forego, for national purposes, the right to examine for licensing practitioners in medicine. He entered at length into an analysis of Lord Elcho's bill, which, he said, was not entitled either to the confidence of the public or profession.

Mr. GROGAN, M.P., expressed a hope that although they could not expect a definite reply from Lord Palmerston, as to the course the government intended to pursue, that they would aid in the speedy settlement of this important subject.

Dr. WOOD said that if Mr. Headlam's bill did not support all the legitimate interests of medical reform he would not support it. It establishes a uniform education throughout the United Kingdom; but more than that it establishes a rigid system of tests of the qualifications of candidates under a superior council, so as to prevent any chance of candidates being improperly licensed. It establishes an unrestricted right of practice throughout the kingdom. All this it does by having the present machinery so modified as to meet the requirements of the times. In fact, it reforms without destroying. Lord Elcho's bill, no doubt, carries out many of the objects of

medical reform, but not so completely, and in doing so, sacrifices all existing bodies. It should not be forgotten those institutions are peculiarly British; they do not exist abroad; they were established in strict conformity with the principles of the British constitution, and with the same view of giving to the medical profession the power of self-government. To disturb them, therefore, would be retrograde, and not progressive legislation. To hand over the profession to be regulated solely by a council appointed exclusively by the Crown, as the bill of Lord Elcho proposes, would be to establish an un-English despotism.

The deputation, after nearly two hours' interview, then withdrew.

RESTORATION OF PERSONS APPARENTLY DROWNED.

We have been requested by the Committee of the National Life-Boat Institution to publish the instructions issued by the Humane Society and by Dr. Marshall Hall, and to state that the Committee are anxious to obtain information from Medical men who have attended persons apparently drowned as to the comparative value of the two methods of treatment.

ROYAL HUMANE SOCIETY'S INSTRUCTIONS.

SEND QUICKLY FOR MEDICAL ASSISTANCE. — *Cautions.* —

1. Lose no time. 2. Avoid all rough usage. 3. Never hold up the body by the feet. 4. Nor roll the body on casks. 5. Nor rub the body with salt or spirits. 6. Nor inject tobacco smoke nor infusion of tobacco. I. Convey the body carefully, on its face, with the head and shoulders supported in a raised position, to the nearest house. II. Strip the body, and rub it dry; then wrap it in hot blankets, and place it in a warm bed, in a warm chamber free from smoke. III. Wipe and cleanse the mouth and nostrils. IV. In order to restore the natural heat of the body: Move a heated covered warming-pan over the back and spine. Put bladders or bottles of hot water, or heated bricks, to the pit of the stomach, the arm-pits, between the thighs, and to the soles of the feet. Foment the body with hot flannels. Rub the body briskly with the hand; do not, however, suspend the use of the other means at the same time, but, if possible, immerse the body in a warm bath at blood heat, or 100° of the thermometer, as this is preferable to the other means for restoring warmth. V. Volatile salts or hartshorn to be passed occasionally to and fro under the nostrils. VI. No more persons to be admitted into the room than are absolutely necessary.

If apparently Dead from intense Cold.—Rub the body with snow, ice, or cold water. Restore warmth by slow degrees, and after some time, if necessary, employ the means recommended for the apparently drowned. In these accidents it is highly dangerous to apply heat too early.

General Observations.—On the restoration of life, a teaspoonful of warm water should be given; and then, if the power of swallowing be returned, small quantities of wine, or diluted brandy, warm. The patient should be kept in bed, and a disposition to sleep encouraged, except in cases of apoplexy, intoxication, and coup-de-soleil. Great care is requisite to maintain the restored vital actions, and at the same time to prevent undue excitement.

The *Treatment* recommended by the Society to be persevered in for *three or four hours*, as it is an erroneous opinion that persons are irrecoverable because life does not soon make its appearance, cases having come under the notice of the Society of successful results even after five hours; and it is also absurd to suppose that a body must not be meddled with or removed without the previous permission of a Coroner.

DR. MARSHALL HALL'S INSTRUCTIONS.

1. Treat the patient instantly, on the spot, in the open air, exposing the face and chest to the breeze (except in severe weather).

I.—*To Clear the Throat.*—2. Place the patient gently on the face, with one wrist under the forehead [all fluids and the tongue itself then fall forwards, leaving the entrance into the windpipe free.] If there be breathing wait and watch; if not, or if it fail—

II.—*To excite Respiration.*—3. Turn the patient well and instantly on his side, and 4. Excite the nostrils with snuff, or the throat with a feather, etc. and dash cold water on the face

previously rubbed warm. If there be no success, lose not a moment, but instantly—

III.—*To imitate Respiration.*—5. Replace the patient on his face, raising and supporting the chest well on a folded coat or other article of dress. 6. Turn the body very gently on the side, and a little beyond, and then briskly on the face, alternately, repeating these measures, deliberately, efficiently, and perseveringly fifteen times in the minute, occasionally varying the side [when the patient reposes on the chest this cavity is compressed by the weight of the body, and expiration takes place; when he is turned on the side, this pressure is removed, and inspiration occurs.] 7. When the prone position is resumed, make equable but efficient pressure, with brisk movement, along the back of the chest, removing it immediately before rotation on the side [the first measure augments the expiration, the second commences inspiration.]

The result is—respiration, and, if not too late, life.

IV.—*To induce Circulation and Warmth.*—8. Meantime rub the limbs upwards, with firm grasping pressure and with energy, using handkerchiefs, etc. [by this measure the blood is propelled along the veins towards the heart]. 9. Let the limbs be thus warmed and dried, and then clothed, the bystanders supplying the requisite garments. 10. Avoid the continuous warm bath, and the position on or inclined to the back.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF LORDS, THURSDAY, JUNE 4.

SALE OF POISONS BILL.

Earl GRANVILLE, in moving that the House go into committee on this Bill, briefly explained the nature of its provisions. The object of the Bill was twofold—to prevent, if possible, the sale of poisons for the commission of murder on the one hand, and the occurrence of accidents by the sale of poisons by mistake on the other. There are at present 16,000 people engaged in the sale of poisons, without any restriction whatever as to the part of the premises in which those poisons should be kept, and without being required to keep them separate from other articles, or under lock and key—a state of things which had led to many deplorable accidents and mistakes. There were 500 cases every year of deaths from poisoning, either intentional or unintentional, and there was reason to believe that not more than one case out of three or four that actually occurred came to the knowledge of the Registrar-General. To avoid, as far as possible, the sale of poisons by mistake, it was provided by the Bill that they should be distinctly labelled and kept apart from other articles in the shop or dispensary. He did not think this was a perfect Bill, nor, indeed, did he believe it possible to legislate so as entirely to prevent intentional and unintentional poisoning; but he thought the very reasonable and moderate restrictions laid down in the measure would, in the main, tend in a very simple way to diminish the number of deaths that were now occasioned in this unhappy manner. (Hear.)

Lord CAMPBELL said, there could be no doubt that great evils now sprung from the manner in which poisons were sold, and he rejoiced that the subject had been taken up by the Government. He most warmly thanked his noble friend for the Bill which he had submitted to the House, and would be prepared to give it all the support in his power.

The Marquis of WESTMEATH gave an explanation respecting a case which he had brought under the notice of the House in the last Parliament, when he stated that poison had been dealt out by two striplings. The chemist wished him to state that one of the parties was an assistant, and not a stripling.

The Earl of HARDWICKE thought the present measure certainly would materially affect the interests of the chemists of this country, and would, he was assured, if passed, compel the closing of two-thirds of the druggists' shops throughout England. He was informed that poisons were so commonly used in trade and manufactures that even if the Bill passed there would still remain facilities for those who desired it to obtain them. Among other things mentioned in the Bill was antimony, but antimonial wine was known as an emetic in ordinary use; but if the Bill passed, that medicine could not be sold without the risk to the seller of incurring the penalties prescribed in the Bill. It was the same with sal ammoniac and oxalic acid, which were both used extensively for many

purposes, and he was reminded by a noble friend that the latter article was requisite for cleaning boot-tops. If this Bill passed there would be a pretty turn out in the Leicestershire hunting field. (A laugh.) Chloroform would be prohibited, and the sale of patent medicines, many of which contained preparations of opium, and other drugs which the Bill would make poisons, almost annihilated. The noble earl had stated that all poisons should be vended only in square bottles, but in many medicines prescribed by physicians poisons formed ingredients, and under the proposed law the patient upon seeing the square bottles would know that they contained poison, and might naturally be disinclined to take the medicine. There were many other matters of detail upon which grave objections had been made, and he hoped that before the Bill was finally disposed of the noble earl would receive the benefit of the suggestions which a deputation from the Pharmaceutical Society were anxious to offer him.

Lord TALBOT DE MALAHIDE was of opinion that better means might be devised to attain the object of the Bill, and thought that a bright example had been set by Ireland in that respect. He found that many of the clauses in the Bill were taken from the Irish Apothecaries' Act of 1791—an Act which had been found most beneficial, and of which no one had complained. One evil which existed, which would interfere in the working of this or any other similar measure, was the difference between the pharmacopœias of the three kingdoms, and it would be a great advantage if those distinctions could be abolished. In the Bill an attempt was made to define poisons, which he thought was most dangerous, and would suggest that no definition should be given, for if certain articles were stamped as poisons it would stimulate the discovery of other substances having the same effect. He would also suggest that there should be greater facilities for prosecuting apothecaries for selling poison improperly. He believed that in Scotland, where there was a public prosecutor, there was not the same safeguards against poisoning as existed in the other divisions of the United Kingdom. The sheriffs in Scotland possessed the authority of coroners; but inquests were of very rare occurrence, and he was satisfied that many cases of poisoning escaped investigation. He regretted that it was proposed to exempt druggists and chemists from the operation of the Medical Bills now before the House of Commons. He trusted that an attempt would be made to elevate their *status*, as in Ireland, and that a law would be enacted to prevent persons not properly qualified from selling drugs.

Lord REDESDALE suggested that the Bill should be referred to a select committee. (Hear, hear.) It was an attempt to legislate on a subject upon which their lordships possessed no practical information, and he believed that further inquiry would be found most useful. He also objected to the minute particularity of the Bill.

Earl GRANVILLE replied briefly to some of the remarks which had been made on the Bill. The subject was one upon which it was no doubt extremely difficult to legislate; but, without saying that the present Bill, if passed into a law, would utterly prevent poisoning, he was satisfied it would materially diminish the evil. It would not meddle with substances taken as medicine dispensed under prescriptions, or with poisons used for the legitimate purposes of trade. He regretted that the pharmacopœias of the three kingdoms were not the same, but was glad to state that the respective Colleges of Physicians were now communicating with one another with a view to that object. He had not the slightest objection that the Bill should be referred to a select committee. (Hear.)

HOUSE OF COMMONS—THURSDAY, JUNE 4.

PAUPER LUNATICS (MARYLEBONE.)

On the motion of Mr. KINNAIRD, a copy was ordered of any communication from the board of guardians of St. Marylebone, in answer to the Report of the Commissioners on Lunacy, in regard to the treatment of pauper lunatics in Marylebone workhouse.

SHEEP, &c., CONTAGIOUS DISEASES.

This Bill was read a second time, and ordered to be referred to a select committee.

FRIDAY, JUNE 5.

THE HOSPITAL AT NETLEY.

In the debate on the Army Estimates,

Mr. JOSEPH LOCKE said, this discussion had elicited the im-

portant fact, that for the Netley Hospital, which was originally estimated to cost £150,000, an extra sum of £110,000 was intended to be asked. Netley Abbey looked on the mud banks of the Southampton water, and he (Mr. Locke) should not have thought that that was a very eligible spot for a Hospital. (Hear.) £70,000 had been already expended on that Hospital, but it was rumoured that the Government intended to abandon it; and he wished to know whether that was the fact. The extra vote of £110,000 upon an original estimate of £150,000 showed how loosely and blunderingly these estimates were laid before the House, and the noble lord at the head of the Government ought to be held responsible for them. Only think of £260,000 being expended upon a Hospital which was to accommodate no more than 1000 men!

Mr. STAFFORD believed that he could give the hon. gentleman (Mr. Joseph Locke) some information with regard to the Netley Hospital. It was begun in utter defiance and ignorance of all those principles of sanitary knowledge which we had learnt by bitter experience during the last few years. (Hear.) Its site was chosen without any reference to Medical authorities. When the building was commenced the attention of those who ought to have been consulted, and who had the interest of the British soldier at heart, was drawn to it, and it was found necessary to make so many important and costly alterations that the Government consented to expend £110,000 more upon it. Even that increase, he believed, would not be sufficient to build it in the manner it ought to be built.

Mr. L. KING inquired whether it was true that the Government had purchased, or had agreed to purchase, a piece of land in the neighbourhood of Aldershot for the erection of an Hospital, the camp being exceedingly unhealthy.

Sir J. RAMSDEN replied that so far from Aldershot being unhealthy, the number of sick was one per cent. less than in any other quarters in the kingdom. The Government were at present in treaty for the purchase of a small piece of land for an Hospital, with a view to provide the necessary accommodation for an average number of patients. The Government had taken the best Medical opinion with respect to Netley Hospital, and it was entirely in favour of the present arrangement.

THE METROPOLITAN HOSPITALS.

Lorn RAYNHAM gave notice that on an early day he should move for a Select Committee to inquire into the state of the Metropolitan Hospitals.

MEDICAL REFORM.

Petitions were presented by Sir G. Grey, in favour of Lord Elcho's Medical Bill, from Medical Practitioners at Hertford, Melrose, Falkirk, and Kelso; by Sir E. Perry, from the Medical Practitioners of Devonport, in favour of the Medical Bill; from the provost, magistrates, and council of the city of Aberdeen, against Mr. Headlam's and in favour of Lord Elcho's Medical Bill; and from the senate of Marischal College and University to the same effect. Petitions were also presented by Mr. Vance from the General Medical Practitioners of Ireland, against Mr. Headlam's Medical Bill, and in favour of Lord Elcho's; by Sir W. Russell, from certain Medical Practitioners of Dover, praying that the Medical Bill, No. 17, before the House, may pass into law; by Mr. Hill, from Practitioners of Medicine residing in Wem, in the county of Salop, in favour of Mr. Headlam's Medical Bill; by Mr. B. Hope, from the Medical Practitioners of Maidstone and its neighbourhood, in favour of Mr. Headlam's and against Lord Elcho's Medical Bill; from 26 Medical Practitioners in Dundee, in favour of Lord Elcho's Medical Bill; and from Dr. Monro, M.D., of Dundee, in favour of Mr. Headlam's Medical Bill; and from Wirksworth, in favour of Mr. Headlam's Medical Bill; by Sir J. Trollope, from the Medical Officers of Poor-Law Unions in England and Wales, agreed to at a general meeting in London, praying for a redress of their grievances, and that the recommendations of the Select Committee of the House of Commons may be carried into effect; by Sir G. Grey, in favour of Lord Elcho's Medical Professions Bill from Medical Practitioners in Edinburgh, Greenock, and Alloa; by General Codrington, from Medical Practitioners of Greenwich and neighbourhood, objecting to Medical Bill No. 3, and praying that Medical Bill No. 17 should pass into a law; from Mr. Pound, Surgeon to the Hartley Winney Union, praying for redress of the grievances of Poor-law Medical Officers; by Mr. R. H. Dutton, from Mr. L. O. Fox, Surgeon to the Stockbridge Union, praying for redress of the grievances of Poor-law Medical Officers; by Colonel Freestun, from

the Medical Practitioners of Weymouth and Melcombe Regis, in favour of Mr. Headlam's No. 1 Medical Profession Bill; and by Viscount Newport, from the Salopian Medico-Ethical Society, for an alteration of the law as it affects the Poor-law Medical Officers.

MONDAY, JUNE 8.
BOARD OF HEALTH.

The Bill was read a second time.

NETLEY HOSPITAL.

Mr. J. LOCKE wished to remind the Government that no answer had been given to his remarks upon the discrepancy in the estimates for Netley Hospital. He wished to ask why the House of Commons first had an estimate of £150,000 for building this hospital, and were then told that there was to be an excess upon the estimate of £110,000, making a total of £260,000. The hospital was to accommodate 1000 men, and it would therefore cost £260 a man. (Hear, hear.) He wished also to inquire whether the Government intended to proceed with the construction of the hospital.

Sir J. RAMSDEN said, the discrepancy in the estimates of £110,000 arose from the circumstance that when it was first intended to build the hospital for 1000 patients an estimate of 150,000 was put into the votes upon the usual computation of the cost of constructing an hospital upon the old plan, without the modern improvements. In the office £150 a-bed was considered a proper estimate, and as soon as it was arranged that the building was to hold 1000 men the sum of £150,000 was put down in the votes. However, before any steps were taken to construct the hospital a committee of able Medical and scientific men was appointed, who reported that great modifications were required in the original plan. There was no time before preparing the first estimate for the House of Commons to go into the elaborate detail and inquiry which had afterwards been made, and the result was that a much larger estimate for the construction of the hospital was found necessary. The hon. member appeared to think this an exorbitant charge. (Hear, hear.) He could only say that a grave representation had been stated to Lord Panmure, relative to the improvements required, and that a committee of scientific men, engineers and Medical men, was appointed to consider that memorial. The committee made a report, in consequence of which certain alterations and improvements were made in the plan. It was the intention of the Government to proceed with the construction of the hospital.

Sir J. TRELAWNY suggested that the Government should reconsider the estimate for the hospital at Netley, before the expenditure was incurred.

TUESDAY, JUNE 9

Petitions were presented by Mr. Scholefield, from the Metropolitan Counties Branch of the British Medical Association, in favour of a Bill for Restricting the Sale of Poisons; from the Medical practitioners of Belbroughton, in favour of Mr. Headlam's Medical Bill, No. 1; by Mr. Bovill, in favour of Mr. Headlam's Medical Profession Bill, from 16 physicians, surgeons, and Medical officers of Guy's Hospital; from 32 fellows and members of the Royal College of Surgeons; from 13 Medical practitioners at Croydon; from 16 other Medical practitioners; from Mr. James Stedman, of Guildford; by Sir G. Grey, in favour of Lord Elcho's Medical Bill, from Medical practitioners in Hatfield, Welwyn, and Whitwell; by Mr. Moody, from surgeons at Wellington, in favour of Mr. Headlam's Medical Profession Bill; from Medical officers of the Wellington Union, praying relief from grievances affecting them; by Mr. Platt, from members of the Medical profession in Oldham, in favour of Mr. Headlam's bill; by Mr. E. Ball, from T. O'Connor, surgeon, residing at March, Cambridgeshire, praying for the speedy passing of Mr. Headlam's bill; by Mr. Akroyd, in favour of Mr. Headlam's Medical Profession Bill, from 16 medical practitioners of Huddersfield; from James Roberts of Golcar, county of York, and Richard Allatt, of Paddock, county of York, Medical practitioners; from J. Tattersson, of Lepton, county of York, Medical practitioner; by Mr. Coningham, from Medical practitioners residing in Brighton, in support of the Medical Bill of Mr. Headlam; by Mr. McMahon, from the Medical practitioners of Ennis-corthy, in the county of Wexford, in favour of the formation of a council as proposed in Mr. Headlam's Medical Bill, and of the registration clauses in Lord Elcho's bill, and praying that the sale of drugs should be confined to properly qualified practitioners.

LUNATICS IN SCOTLAND.

The LORD ADVOCATE, in moving for leave to bring in a Bill to alter and amend the laws relating to lunatics in Scotland, gave explanations tending to exculpate the Board of Supervision from charges made in the late debate upon this subject. He then stated what was proposed to be done by the Bill—namely, to appoint a commissioner, a Medical inspector-general, a secretary, and a clerk, who would constitute a Lunatic Board. It was not proposed to make the commissioner a member, to the full extent, of the English Lunatic Commission, but a corresponding member, with the power of sitting at the board on appeal being given from the commissioner in Scotland to the Lunatic Commission in England. The Lord-Advocate then described the general powers to be given to the commissioner, the duties of the board, the manner in which the expenses were to be provided for, and various details contained in the Bill relating to the supervision of the asylums and the treatment of the pauper lunatics. Scotland, he observed, had been behind the sister kingdom in this matter; but he trusted he should be more fortunate than his predecessor, Lord Rutherford, and be enabled to carry a measure which he had failed to pass.

Mr. BAILLIE defended the northern counties of Scotland from certain accusations made by the Lord-Advocate in a late debate upon this subject.

Mr. E. ELLICE said, he had heard with considerable satisfaction that the Government had taken up this subject; but he adhered to the accusations he had made on the last occasion, and reasserted that there had been gross culpability on the part of the authorities. In justification of this assertion, he referred to passages in the report, and to evidence relating to cases recorded there. Laws, he said, would be of no avail, unless the Lord-Advocate saw that they were put in execution by the authorities. With reference to the Bill, he would prefer, he said, that the authority of the English Lunatic Commission, assisted by a person of local experience, should be extended to Scotland.

Mr. DRUMMOND likewise reiterated his charges against the Board of Supervision, declaring that he distrusted a separate board in Scotland, and that the treatment of the pauper lunatics there must be put upon an opposite principle to that of considering, in the first instance, the interest of the rate-payers.

Mr. COWAN suggested that there should be a separate asylum for criminal lunatics.

After some remarks by Colonel Clifford, and a reply from the Lord-Advocate, leave was given to bring in the Bill.

NETLEY HOSPITAL.

Sir D. NORREYS rose to move for an address to the Crown for returns respecting Netley Hospital, showing by whom the site was selected, whether any reports were made on its salubrity and general eligibility for its purpose previous to selection, and by whom; by whom the original plans were prepared, whether they were submitted to any medical authority for approval, by whom they were officially sanctioned, and whether any report was made upon them, and by whom, previous to their being sanctioned; also for a statement of the alterations of or additions to the original plans which have been determined on, by whom they were recommended, to whom they were referred for approval; and for a copy of correspondence or reports relating thereto which have led to the adoption of the amended plan.

Sir J. RAMSDEN said there was no intention on the part of the Government to oppose the granting of these returns, which he hoped would be the means of removing a misapprehension that prevailed with respect to Netley Hospital. To the report that the site for the hospital was chosen without proper consideration he could give the most decided contradiction. The site was not selected by any Government official at all, but by a gentleman of very high standing in the medical profession, who was directed to choose within certain limits the most eligible situation for a hospital. That gentleman made a report, and the site was chosen in accordance with his recommendation.

Mr. STAFFORD said a document was forwarded to Lord Panmure by all the medical men of the Middlesex Hospital, an institution second to none for its management and its construction. It entered into details with respect to the construction of the Netley Hospital; it stated that every one of the wards had to receive the air either through the corridor or else through windows looking to the north-east, which was

well known to be the aspect least favourable to the recovery of patients. It severely criticised the height and width of the wards, the position of the rooms assigned to the orderlies, the whole system of ventilation, and the confined court, not extending above 170 feet, into which the windows of all the wards looked. It described the system of latrines as so dangerous that there would be constantly throughout the building what was called an hospital atmosphere, in which it would be impossible for the attendants to maintain their health, or for the sick to escape from fever, gangrene, and other diseases. (Hear.) He would move for a return of this document, in order that it might be laid before Parliament *in extenso*. It was signed by gentlemen whose names commanded much respect, and who were of great celebrity. He held in his hand their last communication to Lord Palmerston, which, he was sorry to say, had not been favoured with an answer. (Hear, hear.) It was dated the 4th of May, 1857, and commenced as follows:—

"We have the honour to inform your lordship that a deputation from our body attended, on Tuesday, the 28th, at the War-office, on the subject of the proposed Royal Victoria Hospital. Captain Laffan explained to us the nature of certain alterations which the military authorities had decided upon making in the internal arrangements of the building, and especially in the position of the latrines; and he also entered at considerable length into the system of artificial ventilation, which he stated would probably be ultimately adopted."

He might here mention that the plan of Captain Laffan was to draw the cold air from a field in the vicinity by means of an enormous tunnel (A laugh), and to suck it up through the building by means of a vast furnace placed on the top of the hospital, every window of course being kept shut. (Laughter.) The deputation pressed upon Captain Laffan the perils of such a plan of ventilation, told him that the natural mode of opening the windows would be far better (Hear), that the furnace would cause an enormous expense, that if at any time the heat should be diminished the bad air would not ascend, but descend, and that the proposal of forcing up the effluvia of latrines by means of steam had been tried and proved a failure. (Hear, hear, and a laugh.) They then went on to say:—

"While we admit that the adoption of some of our suggestions is likely to be productive of a certain amount of benefit, we are yet unanimously of opinion that the whole plan of the hospital is radically faulty, and we are persuaded that the contemplated scheme of artificial ventilation as explained to us by Captain Laffan will in all probability aggravate the very evils which it is intended to remedy."

That was the statement of men whose character and eminence no one could question. He hoped it was not too late to carry into effect the suggestions which they had made from practical experience in their own hospital. He said nothing about the site and the muddy banks left bare at low tide. He would not enter into those questions, nor give much weight to the alarm about ague, which was stated to be one reason against the situation of the building. He rested his objections upon this—that alter the building as they might they could never make it such a hospital as ought to be constructed with their present knowledge of sanitary arrangements, and with the experience which had been so dearly bought. (Hear.)

Mr. S. HERBERT said: As regards the site, there is a great difference of opinion. I always understood that Southampton water was not what is called an unwholesome, but a relaxing climate. If this Hospital is meant for the reception only of individuals coming from tropical climates, I do not think that a disadvantage. But I am informed that Southampton water lies upon a bed of peat, with a coating of mud, not so deep but that the salt water percolates through, and there bubbles up sulphuretted hydrogen gas. (Laughter.) It is not a very pleasant prospect for the windows of a Hospital. At the same time, I believe that the Hospital has been sufficiently removed back, or the esplanade thrown so far into the water that any noxious effect from any gas of the kind will be prevented. But there is a radical error in the selection of the site. You are going to build a Hospital of 1000 beds. Your object will be twofold. First, it will be made a model for army Hospitals; secondly, it is to become a Medical School for young Practitioners of the army. If it be an invalid Hospital you will receive into it all men sent home pensioned and discharged from foreign countries. But it is not in connexion

with any existing garrison. If a man falls sick at Portsmouth you cannot compel that man to be shaken for 40 miles over a railroad, because you have built a large Hospital, and want to fill the beds. And there will be this disadvantage, that those who are to receive instruction in this Hospital will be confined to the study of chronic cases, of men who have come ill from abroad, and not of men taken ill on the spot. I believe the faults of the Hospital have been remedied to a great degree; but upon the question as to whether the Hospital is in a position which will make it the most available for the use of the army, I confess I am bound to say the choice of a site has been most unfortunate. (Hear, hear)

Lord PALMERSTON.—With reference to the site, I certainly never heard that that side of Southampton water was called unhealthy. We all know that the forest, which is on the opposite side, being on very low ground and wet, has been considered to a certain degree unhealthy; but the spot on which this Hospital is to be erected rests upon gravel, and is elevated and open to currents of air, and there has been no reason to suppose that it would be unhealthy, or not adapted to the purpose for which it is intended. With regard to the construction, there is considerable difference of opinion as to the proper mode of constructing a building designed for a hospital. My right hon. friend (Mr. Sidney Herbert) states that the most approved plan is one in which there is a corridor, with blocks of buildings attached, separated from each other by spaces, and stretching away at right angles. There are certainly advantages in that arrangement, because it enables you to get a draught by side windows through each ward. But those blocks separated from each other by spaces, look into narrow and confined courts, because the very blocks make courts of themselves, and so prevent a free and complete circulation of the air. Again, it has generally been found that large wards are bad, and that it is much better that there should be a small number of patients in each ward. (Hear, hear.) I can only assure the House that this matter has attracted the serious attention of the Government, and that great pains have been taken to get men capable of giving an opinion upon it. The papers which my hon. friend (Sir J. Ramsden) has agreed to produce will show what steps have been taken on the subject; but to a matter of such importance as this great attention should be paid, so that the building should be fit for the purpose to which it is intended, and the House may rest assured that we shall not with our eyes open erect an edifice which shall be a source of sickness and disease, instead of a source of health. (Hear, hear.)

Mr. TITE assured the House that a very general opinion had been expressed among practical men that, after all, the only good system of ventilation was that of a free circulation of natural air by means of open windows. (Hear, hear.) A great and costly experiment had been made of a different system at Guy's Hospital, the leading feature of which was a large furnace, but it had entirely failed; and, indeed, they had only to look to the House in which they were assembled, where, after enormous expenditure in experiments upon ventilation (hear, hear), recourse was at last had to open windows for a natural current of air. (Hear, hear.) So, again, with respect to warming a building; he thought that was best done by means of an open fireplace in each department, and he saw no difficulty in applying those natural principles of ventilation and warming to the Hospital at Netley.

Sir D. NORREYS briefly replied.

Sir F. SMITH said, there had been 15 tenders sent in for the erection of the proposed building, and that between the highest, which was £256,000, and the lowest, which was £168,000, there had been no less a difference than £88,000.

The motion was then agreed to.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise on June 4th, 1857:—

BAKER, WILLIAM LANGWORTHY, Newton Abbots, Devon.
KIERNAN, L., Baleath-lodge, co. Westmeath, Ireland.
OVERTON, JOHN GREENWAY, Coventry.
SIMPSON, THOMAS PEMBERTON, Scarborough.
SMITH, WILLIAM JOSIAH.
STEWART, WILLIAM, Coekermouth.
TAYLOR, ADAM, Norwich.

ROYAL COLLEGE OF SURGEONS.—The following members having undergone the necessary examinations on the 19th and 21st ult., were admitted Fellows at the last meeting of the Council:—

ALLINGHAM, WILLIAM, Finsbury-square.
BOWDEN, STEPHEN, R.N.
CLAPTON, EDWARD, St. Thomas's Hospital.
FLOWER, WILLIAM HENRY, Queen Ann-street.
HULKE, JOHN WHITAKER, King's College, Strand.
JACKSON, THOMAS CARR, Hamilton-place, New-road.
MAUNDER, CHARLES FREDERICK, Finsbury-place South.
NOLLOTH, EDWARD, R.N.
NUNN, THOMAS WILLIAM, Stratford-place.
ROSS, JAMES TYRRELL CARTER, Bengal Medical Staff.
RUDALL, JAMES THOMAS, Rochester-sq., Camden-town.
SIBLEY, SEPTIMUS WILLIAM, New Burlington street.
TEALE, THOMAS PRIDGEN, Leeds.
TAAFFE, RICHARD PATRICK, Pavilion-parade, Brighton.

The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 5th instant:—

DIX, WILLIAM FREDERIC, Smallburg, Norfolk.
HIEKS, CHARLES CYRIL, Toddington, Bedfordshire.
MACKINTOSH, MATTHEW, Sleaford, Lincolnshire.
MAGOR, THOMAS, St. Columb, Cornwall.
M'SHANE, EUGENE, Dungannon, County Tyrone.
MAYNARD, F. F. M., Kirk Bramwith, near Doncaster.
MEYER, ALEXANDER JOHN, Calcutta.
SHERATON, GEORGE ROBERT, Sedgefield, Durham.
SKINNER, DAVID SHORTER, Headcorn, Kent.

DEATHS.

BROWNE.—On the 1st of March last, at Bathurst, Australia, R. F. Browne, Esq., Surgeon, formerly of William-street, Lowndes square, London.
RAINFORTH. On Sunday last, at School-hill, Bolton, aged 78, John Rainforth, Esq., Surgeon.
WINTERBOTTOM. On the 26th of May, aged 63, at Delph, Saddleworth, Manchester, James Winterbottom, Esq., M.R.C.S. Eng. 1819; L.S.A. 1818.

TESTIMONIALS.

Dr. WALLING.—This gentleman, who has lately retired from professional practice at Yealand, received on Monday last a testimonial, which must have been exceedingly gratifying to him. The presentation took place at Silverdale, and the gift consisted of a purse of £50, and a drawing-room Time-piece, bearing the following inscription, expressive of the feelings of the donors:—"Presented to John Walling, Esq., M.D., on his retirement from Yealand in 1857, as a token of the esteem and gratitude of his friends."

THE TWO BILLS.—Professors Syme, of Edinburgh, Buchanan, of Glasgow, and Pirie, of Marischal College and University, Aberdeen, introduced by Colonel Sykes, had an interview last week with Sir George Grey at the Home-office, on the part of the Universities which they respectively represented, to oppose the Bill of Mr. Headlam, and to support that of Lord Elcho for Medical Reform.

THE Royal Commission on the Medical Department of the army, after a brief adjournment for the holidays, have resumed their sittings at No. 1, Whitehall-yard. The meeting on Monday was presided over by the Right Hon. Sidney Herbert, M.P.; and the other commissioners present were Mr. Augustus Stafford, M.P., Sir Henry K. Storks, Dr. Andrew Smith, Sir T. Phillips, Mr. Raynald Martin, and Sir James Clarke.

THE SANGUINARIA CANADENSIS.—It may not be uninteresting to our readers to have a short account of this plant, to which Dr. Fell professes to attach importance as a curative agent in cancer. The following is a portion of the account given of it by Wood and Bache, in their United States Dispensatory. It is an herbaceous perennial plant, belonging to the natural order Papaveraceæ, and forms one of the earliest and most beautiful spring flowers of North America, growing in abundance throughout the United States. All parts of the plant are active, but the root alone is official. This is horizontal, abrupt, often contorted, about as thick as the finger,

two or three inches long, fleshy, of a reddish-brown colour on the outside, and a brighter red within. When dried, it is in pieces of from one to three inches long, and from a quarter to half an inch or more in thickness, flattened, much wrinkled and twisted, of a reddish-brown colour externally, with a spongy, uneven fracture, the surface of which is at first bright orange, but becomes of a dull brown by long exposure. The colour of the powder is a brownish orange-red. It has a faint narcotic odour, and a bitterish, very acrid taste, the pungency of which remains long in the mouth and fauces. It yields its virtues to water and alcohol. A peculiar alkaline principle, termed *sanguinarina*, may be obtained, upon which the acrimony of the plant depends. Sanguinarina is an acrid emetic, with stimulant and narcotic powers. In small doses it excites the stomach, and accelerates the circulation; more largely given, it produces nausea and depression of the pulse; and in a full dose, occasions active vomiting. The effects of an overdose are violent emesis, a burning sensation of the stomach, vertigo, faintness, dimness of vision, and alarming prostration. Snuffed up the nostrils, it excites much irritation. Upon fungous surfaces it acts as an escharotic; it has been given in typhoid pneumonia, catarrh, pertussis, croup, phthisis, rheumatism, jaundice, hydrothorax, and some other affections, either as an emetic, nauseant, or alterative, and its virtues are highly praised by many judicious practitioners. As an emetic the dose is from 10 to 20 grains, and for other purposes from 1 to 5 grains, repeated more or less frequently. There is an officinal tincture; and an infusion in vinegar has been employed advantageously as a local application in obstinate cutaneous affections.

CONCOURS AT PARIS.—The Concours for the important post of Physicians to the Bureau Central des Hôpitaux has just terminated in the election of MM. Goupil and Hervieux.

THE ETHNOLOGICAL SOCIETY.—This Society held its anniversary meeting on Friday, May 29. The council's report announced various changes, and a considerable improvement in financial and other respects. The following gentlemen were elected officers and council for the ensuing year:—President, Sir James Clark; Vice-Presidents, the Archbishop of Dublin, Sir Benjamin Brodie, the Hon. Mountstuart Elphinstone, Mr. Beriah Botfield, M.P.; Treasurer, Mr. Frederick Hindmarsh, F.R.G.S.; Hon. Secretary, Mr. Thomas Wright, M.A., F.S.A.; Council, Mr. W. F. Ainsworth, Mr. L. J. Beale, Mr. C. H. Bracebridge, Major-General Briggs, Mr. J. S. Coleman, Mr. J. Conolly, M.D., Mr. R. Dunn, Mr. R. N. Fowler, Mr. James Heywood, Mr. T. Hodgkin, M.D., Mr. R. Ingram, M.P., Mr. James Kennedy, Mr. D. King, M.D., Mr. Malcolm Lewin, Lieutenant-General Sir Charles Pasley, Rev. E. J. Selwyn, Messrs. J. J. Stainton, R. Tait, C. D. Tolmè, T. H. Tuke, M.D.

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 6, 1857.

BIRTHS.

Births of Boys, 774; Girls, 768; Total, 1542.

Average of 10 corresponding weeks, 1847-56, 1497.3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	447	421	868
Average of the ten years 1847-56 ... ..	...	...	979
Average corrected to increased population	...	...	1077
Corrected average for corresponding week in ten years 1847-56	508.9	470.3	979.1
Deaths of people above 90 ... ..	...	...	3
Deaths in 13 General Hospitals	38	19	56

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29.877 in.
Mean temperature	60.6
Highest point of thermometer	82.9
Lowest point of thermometer	39.3
Mean dew-point temperature	51.0
General direction of wind	S.W.
Whole amount of rain in the week	0.23
Amount of horizontal movement of air in the week	505 miles.

DEATHS REGISTERED DURING THE WEEK.

CAUSES OF DEATH.	In the Week ending Saturday, June 6, 1857.							Averages of Temperature and Deaths in 10 Weeks.
	Deaths of Persons.							
	AT ALL AGES.	Under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.	At 80 Years of Age and Upwards.		
Mean Temperature	Mean temp. 60° 6							56° 5
ALL CAUSES	868	423	124	143	133	31		979° 1
SPECIFIED CAUSES	852	421	124	143	133	31		971° 6
DISEASES:—								
1. Zymotic Class	170	140	14	6	8	2		234° 6
2. Dropsy, Cancer, and others of uncertain seat	44	5	4	22	13	..		44° 5
3. Tubercular Class	172	66	68	33	5	..		187° 7
4. Of Brain, Nerves, etc. ..	97	43	5	19	25	5		116° 3
5. Of Heart, etc.	41	2	6	17	15	1		40° 5
6. Of Respiratory Organs ..	125	71	7	17	24	6		121° 8
7. Of Digestive Organs ..	52	25	7	7	11	2		63° 3
8. Of Kidneys, etc.	11	1	1	4	4	1		13° 2
9. Of Uterus; viz.—Puer- peral Disease, etc. ..	12	..	5	2	5	..		8° 8
10. Of Joints, Bones; viz.— Rheumatism, etc.	7	2	2	1	2	..		7° 8
11. Of Skin, etc.	2	1	..	..	1	..		1° 9
12. Malformations	4	4	..	..	..	..		3° 9
13. Debility from Premature Birth, etc.	29	28	..	1	..	..		23° 5
14. Atrophy	28	20	1	2	5	..		25° 9
15. Age	25	..	..	..	12	13		35° 0
16. Sudden	12	3	2	6	1	..		6° 8
17. Violence, Privation, etc. .	21	10	2	6	2	1		36° 1
CAUSES NOT SPECIFIED. . .	16	2	..	..	..	..		7° 5

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Pop- ulation. 1851.	Small- pox.	Measles.	Scar- latina	Whoop- ing- Cough.	Dia- rrhoea.	Ty- phus.
West	376,427	..	..	4	6	2	3
North	490,396	..	6	5	9	5	9
Central ...	393,256	..	10	5	11	3	2
East	486,522	..	5	2	11	6	8
South	616,635	1	3	2	10	10	2
Total..	2,362,236	1	24	18	47	26	24

TO CORRESPONDENTS.

Psychologist.—The sum of £30,000 is to be expended upon the erection of a joint Asylum for Lunatics, for the counties of Carmarthen, Cardigan, and Pembroke, and is to be immediately built in the vicinity of Carmarthen. The approval of the Commissioners in Linnay has been received for the building, which is intended to hold 216 patients, and towards which the town and county of Haverfordwest has been permitted to join.

Mr. D. should put his own shoulders to the wheel. He reminds us of the commencement of one of Sydney Smith's charity sermons, "Benevolence is a sentiment common to human nature: A never sees B in distress without wishing C to relieve him."

MORE LITERARY LARCENY—PATTISON v. FELL.
TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Many of your readers have doubtlessly heard of Dr. Pattison. This gentleman, like Dr. Fell, proposed to cure cancer; but for some inexplicable reason has not accomplished his benevolent object so completely as might be wished. He, too, like Dr. Fell, applied to the authorities of the Middlesex Hospital (to treat the cancer cases) in November, 1852; but Dr. Pattison was not appreciated as Dr. Fell has been: "The Governors are precluded from availing themselves of his proposal," was the reply; although, more liberal than Dr. Fell, "he was quite willing to throw it open to the world the moment he was acknowledged by the Profession as its discoverer."

Now, what I wish to direct the attention of your readers to is, the great similarity between the pamphlet of Dr. Pattison (a), and the more pretending work of Dr. Fell. For instance, pages 45 to 48 of Dr. Fell are to be found *verbatim* at pages 14 to 16 of Dr. Pattison. The same remark applies to pages 22, 23, and 32 of Dr. Fell, and pages 25 and 26 of Dr. Pattison. However, we must do Dr. Fell the justice of saying, that he has on two occasions (pages 16 and 43) fairly acknowledged quotations from the high authority of Dr. Pattison.

You have allowed Dr. Ramsbotham the opportunity of making a reclamation to Dr. Churchill; why should you not accord a similar justice to Dr. Pattison in the case of Dr. Fell? I am, &c. SCRUTATOR.
June, 1857.

(a) Cancer, its True Nature, Treatment, and Cure. London, 1855.

M. D.—In the *Repertoire de Pharmacie*, M. Loperdriel advises, to conceal the disagreeable taste of cod-liver oil, the addition of about 10 per cent. of common salt. This is said to render the oil more palatable, and assist the stomach more completely to digest it.

Custos.—It is said that the Archbishop of Paris has narrowly escaped being poisoned, after partaking of an ice into which some colouring-matter, composed of acetate of lead, had been introduced; but we do not know what truth there may be in the report.

R. N.—Occasionally, but very rarely.

H. D.—An English diploma is not sufficient to authorize a Medical man to practise in France without permission from the French authorities.

Mr. Gramshaw's case shall appear in an early number.

Mr. Lumley.—Many thanks.

Mr. Newhouse.—We fear Professional unity would not be increased by the publication of the letter.

CANCER CAUSTICS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE

The following observations occur in a letter to us from Mr. Williams, of Wrexham:—"As there are many in the world, like Dr. Fell, who like novelties, and as there are many others who dread the knife, I beg leave to say that the best substitute for the knife is bichloride of mercury. A single application appears to have a specific effect on the whole disease, if properly adapted. One grain would be sufficient to destroy a schirrus of the size of a horse-bean, and so on in proportion; but it must be put on a sore surface. It does not appear that mercurialism is apt to be produced by any single application of this powerful substance; but it has a peculiar and an extraordinary effect on the entire chain of diseased glands in its vicinity."

Investigator.—The President of the London College of Surgeons is elected annually, and holds his office in general for only one year; but there are several instances in which the same gentleman has been elected President for the second or third time at more or less distant intervals. The late Mr. Guthrie was three times President of the College.

Dendrophilus.—The *Willingtonia Gigantea* is a tree which has been only lately described, and belongs to the order of Coniferae. The specimen now being exhibited was brought from California.

Mr. J. Thomson.—It is necessary that the two Medical Practitioners who certify to the state of mind of a supposed lunatic should see the patient separately from each other, and separately specify the grounds on which their opinions are founded. If the Medical Practitioners are in partnership the certificate is invalid.

A Student.—We understand that the examinations in Celsus and Gregory, formerly held on the Saturdays in certain months at Apothecaries' Hall, have been discontinued.

COMMUNICATIONS have been received from—

EARL GRANVILLE; SIR GEORGE GREY; MR. WADDINGTON; DR. FULLER; DR. PARKER; DR. ROBERT LEE; DR. BENICE JONES; DR. SYLVESTER; MR. PRESCOTT HEWITT; DR. PETTIGREW; MR. BRODHURST; MR. BAKER BROWN; MR. H. THOMPSON; MR. HAYNES WALTON; MR. COXETER; MR. HOLT; DR. GROSS; DR. RICHARDSON; MR. EAGLAND; MR. GRAMSHAW; MR. LUMLEY; MR. NEWHOUSE; MR. LOBB; MR. GROVE; DR. VINER; SIR J. K. SHUTTLEWORTH; MR. TEALE; DR. FENWICK; MR. FORSTER; MR. LONG; DR. MCWILLIAM; M. D.; PSYCHOLOGIST; MR. J. THOMSON; DENDROPHILUS; DR. T. O'BRIEN; DR. S. GORDON; MR. J. H. LAMBRICK; DR. J. H. McMANUS; MR. C. WHITE; MR. J. WILLIAMS; DR. FYFE; MR. P. BROWN; DR. MADDEN; MR. WIGLEY.

APPOINTMENTS FOR THE WEEK.

13. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing Cross, 1 p.m.

ROYAL BOTANIC SOCIETY, 3¼ p.m.

15. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.; Orthopaedic Hospital, 3 p.m.

CHEMICAL SOCIETY, 8 p.m.

16. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

LINNEAN SOCIETY, 8 p.m.

STATISTICAL SOCIETY, 8 p.m.

17. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopaedic Hospital, 3 p.m.

GEOLOGICAL SOCIETY OF LONDON, 8 p.m.

18. Thursday.

Operations at St. George's, 1 p.m.; Middlesex, 12½ p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.

ROYAL SOCIETY, 8½ p.m.

HARVEIAN SOCIETY, 8 p.m.; Dr. Graily Hewitt, "On a Case of Sudden Death from Plenritic and Pericardial Dropsical Effusion (Scarlatinal?). Relation of Dropsy to Scarlatina."

19. Friday.

Operations at the Moorfields Ophthalmic, 10 a.m.; Westminster Ophthalmic, 1½ p.m.

ORIGINAL LECTURES.

A COURSE OF LECTURES

ON THE

NATURE AND TREATMENT
OF THE DISEASES OF THE EAR.

DELIVERED AT

St. Mary's Hospital Medical School.

By JOSEPH TOYNBEE, F.R.S.

Aural Surgeon to St. Mary's Hospital, Lecturer on Aural Surgery at St.
Mary's Hospital Medical School, and
Consulting Aural Surgeon to the Asylum for the Deaf and Dumb.

(Reported by JAMES HINTON, Esq.)

LECTURE XIV.

RUPTURE OF THE MEMBRANA TYMPANI.

Anatomical Observations.

PREVIOUS to speaking of this affection it is desirable that I should make some remarks upon the functions of the membrana tympani and chain of ossicles. I will firstly speak of the ossicles.

1. *The articulation of the stapes.*—The stapes is generally described by anatomists as being connected with the margin of the fenestra ovalis by a simple membrane. Sir Anthony Carlisle, in his paper on the Physiology of the Stapes, merely speaks of "a membrane which connects it to the edges of the fenestra vestibuli." (a) Professors Sharpey and Quain agree with Sir Anthony Carlisle. They say, "The annular ligament of the stapes (ligamentum orbiculare vel annulare baseos stapedis) connects the base to the margins of the foramen fenestra ovalis. The fibres of the ligament are covered on the outer side by the mucous lining of the tympanum, and on the inner side by the membrane of the vestibule." (b) Mr. Wharton Jones describes this ligament as springing "from the margin of the vestibular fenestra, and it is inserted into the jutting margin of the base of the stapes all round." (c) Sæmmering seems to have had a different view respecting this articulation. He says, "A thin articular capsule connects the base of the stapes to the fenestra ovalis." (d)

If the circumference of the base of the stapes be carefully examined by means of a lens magnifying between three and four diameters, it will be apparent that, instead of a fine margin only, it presents a distinct surface, which when *in situ* looks towards the border of the fenestra ovalis, and is separated from the inner and outer faces of the base by well-defined margins. This circumferential surface of the base of the stapes varies in breadth at different parts. The broadest part looks backwards, measures about a third of a line at its centre, and gradually narrows as it becomes continuous with the superior and inferior surfaces. This broad part, instead of looking directly backwards, is oblique, the direction of its surface being obliquely backwards and outwards. The *anterior* extremity of the circumferential surface of the base is not so broad as the posterior; and instead of being oblique, it is somewhat rounded. The upper and lower surfaces of the base of the stapes are narrower than the anterior and posterior portions; their middle part is the narrowest. When examined in a recent ear, the circumferential surface of the base of the stapes is found to be quite smooth, and covered by a very delicate layer of cartilage, which communicates a soft sensation to the finger when it is touched by a fine probe. The cartilage is most abundant at the two extremities, from which portions of sufficient magnitude can often be removed, especially in young persons, so as to admit of their being examined by means of the microscope. It consists of oval corpuscles, very similar to those in ordinary articular cartilage, but considerably smaller. The surface of the fenestra ovalis, to which the circumference of the base of the stapes is

applied, is larger than that of the stapes. The posterior surface does not quite correspond in its direction with that of the stapes; it looks directly forwards, instead of obliquely inwards and forwards, to face the stapes, which, it will be remembered, at this part looks obliquely backwards and outwards. The articulating surface of the fenestra ovalis is smooth, and has a very compact appearance; no cartilage is detached upon it. It is bounded by two well-defined ridges. The circumference of the base of the stapes is attached to that of the fenestra ovalis, by means of two membranes or ligaments. The inner or vestibular ligament passes from the inner margin of the fenestra ovalis, to the inner margin of the circumference of the base of the stapes. The outer one passes from the outer margin of the fenestra ovalis to the corresponding margin of the base of the stapes. These two ligaments have between them a space which may be called the articular cavity; this cavity contains a sufficient quantity of fluid to lubricate the articulating surfaces of the bones. By the action of the tensor tympani muscle, the base of the stapes is pressed inwards towards the vestibule, as a piston in its cylinder; as soon as the tensor tympani muscle ceases to act, the ligaments above described being elastic, draw it outwards again.

2. *The movements of the stapes.*—The stapes is moved by two muscles, the tensor tympani and the stapedius. Anatomists appear to agree, that the action of the tensor tympani is to press the stapes directly inwards towards the cavity of the vestibule; the general opinion appears to be, that the stapedius muscle merely assists the tensor tympani. Thus, Mr. Wharton Jones says, "The first action of this muscle (the stapedius) will be to press the posterior part of the base of the stapes against the vestibula fenestra. At the same time the long branch of the incus will be drawn backwards and inwards; and the head of the malleus being, by this movement of the incus, pressed forwards and outwards, its handle will be carried inwards, and the membrana tympani thus put on the stretch. Breschet calls the muscle of the stapes a 'luxator,' but I do not know on what grounds." (e) Professors Todd and Bowman write, "In contraction it (the stapedius muscle) would fix the stapes by pulling its neck backwards. It probably compresses the contents of the vestibule." (f) Ellis states, that "it assists in retaining the stapes applied to the fenestra ovalis." (g) Muller writes, "The influence of the stapedius muscle in hearing is unknown. . . . The only effect which it appears to me could be ascribed to it would be to render tense the membrane by which the base of the stapes is connected with the margin of the fenestra." (h)

On account of the smallness of the stapedius muscle, and the very slight degree of movement which it produces, it is difficult to determine in what way the stapedius muscle influences the contents of the vestibule. As the tendon of the stapedius muscle, in its course forwards, passes slightly upwards, there is every reason to infer that it draws the neck of the stapes backwards and slightly downwards, and that it produces a slight rotation of the base. That this rotatory movement of the stapes has the effect of slightly withdrawing its base from the cavity of the vestibule is, I think, shown by the following experiment:—The tympanic cavity and stapedius muscle being exposed, the stapes is to be left *in situ*. By means of a small pair of cutting forceps a section is to be made through the cochlea, a portion of which should be allowed to remain connected with the vestibule. The scala vestibuli of this portion will be observed to be filled with fluid as far as the margin of the section, which fluid is of course continuous with the perilymph in the cavity of the vestibule. If the stapedius muscle be now pulled, or if the neck of the stapes be moved slightly backwards, the fluid in the exposed sac of the scala vestibuli will be found to recede slightly into the scala vestibuli, and its surface to become concave; as soon as the stapes is allowed to return to its quiescent state, the fluid again passes into, fills the scala vestibuli, and assumes a rounded surface. Independently of this action on the contents of the vestibule, the stapedius muscle produces a slight relaxation of the membrana tympani. This is effected by the neck of the stapes, in the act of rotation, passing outwards as well as backwards, whereby it presses slightly outwards the inferior extremity of the incus, while the body of the

(a) Philosophical Transactions, p. 201. 1805.

(b) Elementary Anatomy, p. 940. 1848.

(c) Cyclopædia of Anatomy and Physiology, vol. ii. p. 548.

(d) De Corporis Humani Fabrica, tomus secundus, de Ligamentis Ossium, p. 10. Huschke states that "Sæmmering was wrong in regarding this ligament as a capsule;" Huschke speaks of the ligamentum annulare only.

(e) Cyclopædia of Anatomy, vol. ii. p. 549.

(f) Physiological Anatomy, 1847, part iii. p. 71.

(g) Demonstrations of Anatomy, p. 286.

(h) Elements of Physiology, by Baly, vol. ii. p. 1264. 1842.

latter bone passes inwards, carrying with it the head of the malleus, thus necessarily causing the long process of the latter bone and the membrana tympani to pass outwards. It would therefore appear that the stapedius muscle is the direct antagonist of the tensor tympani muscle, the former relaxing the labyrinthine fluid, the membrana fenestræ rotundæ, and the membrana tympani, and the latter rendering tense the labyrinthine fluid and the two membranes. This view is supported by the fact that the stapedius muscle is supplied by a branch from the portio dura nerve, and the tensor tympani by a branch from the otic ganglion.⁽ⁱ⁾ It may therefore, I think, be fairly inferred that the function of the tensor tympani muscle is to protect the membrana tympani and the labyrinth from injury during loud sounds, while the stapedius muscle places these structures in a position to be impressed by the most delicate vibrations; and it would appear to be brought into action during the process of listening. Instances are not uncommon in which these two muscles are not able to act promptly, and the unpleasant consequences are manifest. Thus, the loud noise produced by firing a cannon near to a person, without any expectation of it on his part, before the tensor tympani muscle has time to contract, is often followed by the sensation of singing or buzzing in the ears, produced, most probably, by a concussion of the expansion of the auditory nerve; these sensations often endure during many years. Cases are not unfrequently met with in which the mucous membrane of the tympanum is thickened, and a considerable amount of dulness of hearing is the consequence; many patients thus affected hear sounds—the human voice, for instance—perfectly well when they are listening, but as soon as the act of volition is suspended, the same voice in the same position is not perceived. In these cases it would appear as if the action of the stapedius muscle were requisite to counteract the pressure upon the stapes by the thick mucous membrane. The friends of young persons suffering in this manner often imagine that there is no dulness of hearing, but merely a want of attention; the fact being, that the power of hearing certain sounds exists in these patients only during the exercise of an effort of the will, instead of being involuntary.

The tensor tympani muscle appears to be of use, not only to prevent the membrana tympani and labyrinth from being injured by powerful sonorous vibrations, but also to protect these organs from the forcible pressure of air, or of a foreign body. Thus the membrana tympani offers considerable resistance to the pressure of a foreign substance which is introduced into the meatus slowly; but the sudden and unexpected contact of a similar body often produces extensive laceration of it. Again, a violent blow on the ear with the palm of the hand rarely produces mischief to the membrana tympani when its reception is expected, whereas a comparatively gentle blow, when not expected, frequently produces not merely a concussion of the nervous labyrinth and very serious derangement of its functions, but the membrana tympani itself is not uncommonly ruptured.^(j)

(i) Since writing the above description my attention has been drawn to a monograph on the ear, by Huschke, above alluded to, in which he has arrived at similar conclusions respecting the functions of the stapedius muscle to those here advanced. As it is evident, from the quotations of writers on the ear, made above, that those views have not been entertained, I have not scrupled to publish my researches at length. The following are Huschke's words:—"While it (the stapedius muscle) presses the posterior extremity of the base of the stapes upon the posterior part of the border of the fenestra ovalis, it lifts the anterior extremity of this bone, and covers the fenestra. At the same time, the descending branch of the incus, with the stapes, is drawn backwards, by which the body of this bone presses the malleus forwards, and as its handle rests upon the membrana tympani it relaxes it. I have often observed this movement of the malleus when I moved the long branch of the incus in the direction of the tendon of the muscle of the stapes; I thus regard the latter as relaxing the tympanum and opening the labyrinth; that is to say, according to the view of Treviranus, it is the antagonist of the tensor tympani muscle. The two have altogether much analogy; they describe an arch looking upwards, pass over a kind of pulley, and are contained in an osseous canal; but they have also opposite functions; the stapedius muscle passes from behind forwards; the tensor tympani from before backwards; the stapedius receives its nerve from the facial, the tensor tympani from the fifth."—*Encyclopædia Anatomique*, tome v. pp. 782, 783.

(j) I may mention two cases illustrative of the above statement. The first, of an eminent physician in London; while playing with his children, he received a blow on one ear, from the head of one of them suddenly and rapidly coming into contact with it; from that time (at least four years since) to the present, there has been a constant singing in the ear. The second case is of a young gentleman, now under my care, who in

The preceding observations indicate that one function, at least, of the vesicles and muscles of the tympanum and the membrana tympani is to act as the analogue of the iris in the eye, and to regulate the amount of sonorous undulations that are to pass to the labyrinth. This view has already been to a certain extent alluded to by previous writers. M. Savart, in the course of his very interesting researches upon the functions of the membrana tympani, arrived at a somewhat similar opinion, although he did not point out the manner in which the muscles acted on the labyrinth and membrana tympani. He says, "Les osselets ont encore pour fonction de modifier l'amplitude des excursions des parties vibrantes des organes contenus dans le labyrinthe."^(k) Mr. C. Brooke, in a lecture delivered at the Royal Institution, in the year 1843, says, "This osseous arrangement may be considered to perform an office in the ear analogous to that of the iris in regard to light,—namely, that of regulating the tension of the various structures that are thrown into a state of vibration, according to the pitch and intensity of the sound to be transmitted to the sentient nervous fibres. This was effected by the conjoined action of the tensor tympani and stapedius muscles, by which the tympanum would be rendered more tense, and a simultaneous change in the position of the stapes would alter the tension of the fluid throughout the labyrinth, and therefore also the tension of the membrane of the fenestra rotunda which intervenes between that fluid and the air in the tympanic cavity."^(l) Professors Todd and Bowman state that there is "much reason to suppose that the tensor tympani muscle is analogous in its use to the iris, and destined to protect the organ from too strong impressions."^(m)

The first effect of the destruction of the membrana tympani gives weight to the opinion here advocated. Mr. Busk lately detailed to me the particulars of a case in which, for a few days after the destruction of the membrana tympani, a patient was unable to endure the whistling of a patient in an adjoining bed; and Cheselden says, that after destroying the tympanum in both ears of a dog, "for some time it received strong sounds with great horror."⁽ⁿ⁾

Pathological Observations.—There are several modes in which the membrana tympani may be ruptured. The most common is a blow on the ear when the person who receives the blow is not expecting it. It may also be ruptured by having a foreign body forced through it, by very loud sounds, by a fall, by violently blowing the nose, and by vomiting. Mr. Wilde speaks of a case in which the membrana tympani was ruptured by a gentleman while bathing thrusting his little finger into the meatus to dislodge some water.

In cases where a simple rupture occurs, as in the instance of a sudden blow upon the ear, the margins of the orifice are usually in contact, scarcely any hæmorrhage occurs, fibrin is effused, and the rent is speedily repaired. On the contrary, where the margins of the membrane are no longer in contact, and where the membrane has been much strained, very considerable irritation may ensue, requiring active anti-inflammatory measures. The most serious cases are those in which the injury has been produced by the introduction of a foreign body, as the dermoid layer usually participates in the disease.

Treatment.—In cases of simple rupture of the membrana tympani, where the inflammatory symptoms are present, it is not desirable to pursue any other treatment than the introduction of a portion of cotton wool into the meatus, so as to prevent the drum being affected injuriously by loud sounds. In cases where there is much inflammation, it is requisite to apply leeches below the ear, and to the margin of the orifice of the meatus, and then to use evaporating lotions to the meatus. Where these remedies are not productive of benefit, counter-irritation must be applied over the mastoid process.

(To be continued.)

play received a box on the ear from his tutor, who came silently behind him; this was followed by a slight bleeding and some pain. On examination I observed a lacerated orifice in the membrana tympani.

(k) *Recherches sur les Usages de la Membrane du Tympan et de l'Oreille Externe*, par M. Felix Savart. Lu à l'Académie Royale des Sciences, le 29 Avril, 1822. *Journal de Physiologie*, par F. Majendie. Tome iv. p. 183.

(l) *Lancet*, 1843, p. 380.

(m) *Physiological Anatomy*, part iii. p. 91.

(n) *The Anatomy of the Human Body*, fifth edition, 1740, p. 205.

ORIGINAL COMMUNICATIONS.

ON TESTING, FOR ANTIMONY AND ARSENIC,

METALLIC DEPOSITS OBTAINED ON COPPER BY REINSCH'S PROCESS.

By HENRY HOUGH WATSON, Esq.

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OWING to the extreme facility there is in applying Reinsch's process, and the great delicacy of it in separating arsenic and antimony from organic matter containing them, it has, of late years, generally been resorted to by chemists and toxicologists, almost entirely to the neglect of Marsh's process, in investigating the numerous cases of poisoning by arsenic which have occurred; and there has been no difficulty in proving the metal deposited upon the copper to be arsenic, when the coated copper was heated in a subliming tube (the arsenic being thereby oxidised and converted into arsenious acid), and when, afterwards, the ammoniacal nitrate of silver, the ammoniacal sulphate of copper, and the sulphuretted hydrogen tests were applied; but, as till within the last year, attention had not been directed to cases of criminal poisoning by antimony, equally easy and direct means were not known of proving, by indubitable results, that a coating or deposit obtained on copper was antimony. Dr. Odling has, however, in the last volume of Guy's Hospital Reports (vol. ii. Third Series,) described a method, discovered by him, of oxidising and bringing into solution a deposit of antimony, in such manner that all the striking and decided characteristics of this metal can be readily and satisfactorily elicited; and perhaps every chemist, whose attention has been drawn to Dr. Odling's paper, will admire and highly appreciate his process; but, it may be questionable whether any can so completely prize it as those who have had cases of poisoning by antimony to investigate both before and since its publication. I am one of the few who have had to detect and prove the presence of absorbed antimony in the tissues in case of poisoning before and since the publication of the paper; and I feel that I cannot too freely acknowledge the superior value of the aid rendered by the process over the other more complex means I had to adopt previously. Yet, though beautifully simple and eligible, as Dr. Odling's process is, consideration of the principle on which it is founded has led me to the discovery of another method, at least equally simple, and, I think, generally, even more eligible, except, perhaps, when the deposit is so thick as to crack off the copper. But, before explaining, it may be well to contrast the position we were in up to the time when the last volume of Guy's Hospital Reports appeared, with the altered one since.

It seems that the Palmer trial was the first criminal case in which Reinsch's process had been used for separating antimony from the tissues; and in that instance Dr. Taylor heated the copper, on which he had got the antimony deposited, with nitrate of soda in a platinum crucible, thereby converting the antimony into antimoniate of soda, which he dissolved or diffused in water, acidulated with hydrochloric acid; and he then precipitated by sulphuretted hydrogen; but, instead of obtaining a precipitate of a decided orange-red colour, which is desirable, as characteristic of the pure sulphuret of antimony, he obtained one of a reddish brown colour, undoubtedly the sulphuret of antimony mixed with some sulphuret of copper; and, therefore, not so satisfactory as an orange precipitate would have been in confirmation of the results of the other tests which he applied (a). Aware of this, I was induced to pursue another course in testing the antimonial deposit I obtained on copper in a case tried at the Liverpool Assizes in August last (Regina v. McMullen). And, as my proceedings in that inquiry have not been published, a some-

(a) There was no sulphuret of copper mixed with the sulphuret of antimony. The liquid was specially tested for copper by ammonia and ferrocyanide of potassium, but there was not the least indication of the presence of that metal. The sulphuret of antimony was mixed with sulphur; its real nature was not determined by colour only, but by its solubility in hydrochloric acid, and subsequent precipitation, as white oxychloride on the addition of this acid solution to water. Hence although the admixture of sulphur is objectionable, the presence of antimony was clearly and distinctly demonstrated by the properties of the precipitate. It will be found better to use a porcelain capsule for the deflagration.—Note by Dr. Alfred Taylor.

what detailed account of a few of the experiments may here be acceptable, more particularly as application has been made to me by several scientific inquirers for information as to the method I pursued on the occasion.

In one experiment I dissolved 7555 grains of the liver, by boiling it in diluted pure hydrochloric acid; and in the hot solution I immersed bright sheet copper, the surface of which was about twenty-two square inches. The copper was kept in the hot solution for four hours, when it was found to have acquired a comparatively thick coating of a violet lead-coloured metal. It was then washed and dried; and, on bending it, some of the coating cracked and fell off it. The quantity which thus fell off weighed a quarter of a grain. I dissolved this quarter of a grain in nitro-hydrochloric acid, and evaporated the solution to dryness; I dissolved the dry residue, by the addition of hydrochloric acid, and to this hydrochloric solution water was added, which caused a bulky white precipitate—the sub-chloride of antimony; but the liquor contained some copper, which was evident from the colour of it; and, therefore, I separated the white precipitate from the liquor, and washed it well, to free it as perfectly as practicable from the liquor. I then dissolved the white precipitate by the addition of solution of tartaric acid, and passed sulphuretted hydrogen gas through the solution, whereby a precipitate of sulphuret of antimony, of a tolerably pure orange-red colour, was obtained. These several results gave full, satisfactory proof that the coating which cracked off from the copper contained antimony. I also passed sulphuretted hydrogen gas through the solution, or liquor separated from the white precipitate, and a nearly black precipitate of sulphuret of copper was obtained. This sulphuret of copper appeared to be nearly as much as the orange sulphuret of antimony; from which I concluded that only about one-half of the quarter of a grain of the coating might be antimony; but the quarter of a grain was only about one-half of the coating on the whole of the twenty-two inches of copper.

After the twenty-two inches of copper had been removed from the solution of the 7555 grains of liver, I immersed three other pieces of copper in the same hot solution, consecutively, for four hours. In each instance I got a coating upon the copper, strong upon the first of the three pieces, and weak upon the last. From their appearance, I concluded that there could not be less than another quarter of a grain of antimony deposited on them; and I believed that from the whole of the 7555 grains of liver I had separated half a grain of antimony, making the total in the whole liver (which weighed four pounds) about 1.85 grains, equal to rather more than 4.9 grains—say to 5 grains—of tartar emetic.

The orange sulphuret of antimony, obtained as mentioned, was dried, and then dissolved by heating it in strong hydrochloric acid. I introduced the solution, along with diluted sulphuric acid and zinc, into Marsh's apparatus; and the flame of the gas produced gave deposits of metallic antimony upon a Wedgewood's ware pestle applied to it; which deposits did not dissolve with strong solution of chloride of lime.

In another experiment, in a solution of about one-eighth of the whole liver in diluted hydrochloric acid, I immersed a piece of pure zinc (after having further diluted the solution with water so much as to make it act but feebly on the zinc), and kept it in the solution for four days, at the expiration of which time it had acquired a dark-coloured or soot-like coating of or containing antimony; for, when the zinc so coated was put into Marsh's apparatus with pure diluted sulphuric acid, the gas produced gave deposits of metallic antimony, not soluble by the application of chloride of lime. The result of this experiment was a valuable corroboration of the results indicative of antimony from the other experiments.

Dr. Odling's process, published since the trial of M'Mullen, consists in first boiling the coated copper in solution of permanganate of potash with a little excess of potash for a few minutes, by which the antimony becomes oxidised, and the oxide is dissolved by the excess of alkali; then filtering the solution, slightly acidulating it, and passing sulphuretted hydrogen gas through it; the truly characteristic orange red precipitate being thereby produced, which may be collected and further tested in the usual manner. It will be perceived how much more directly the orange precipitate is obtained by this process than by that I had to adopt in M'Mullen's case. As Dr. Odling remarks, one ebullition, one filtration, and one reaction, are all that are required for the complete identification of the antimonial deposit; that is, so far as it can be

identified merely by the orange-red precipitate. But, as it is, of course, requisite to test the purity of the potash and of the permanganate of potash used, so as to see that they do not contain antimony, it occurred to me that an advantage would be gained if one of these ingredients could be dispensed with, if the antimony could be oxidised, and the oxide dissolved in solution of potash, without the aid of permanganate of potash or any other salt. Accordingly, I introduced some copper having antimony deposited upon it into a subliming or reduction tube, and then heated to redness that part of the tube where the copper was; the usual white amorphous oxide was formed and deposited in the tube. I then took the copper out of the tube, and poured in a very dilute solution of caustic potash. On boiling this solution of potash, the oxide soon became dissolved. I then filtered the solution, acidulated it with pure hydrochloric acid, and passed sulphuretted hydrogen gas, obtaining the true orange red precipitate of sulphuret of antimony. I have repeated the experiment many times with the same success; and I have further found that, when copper, having a mixture of antimony and arsenic deposited upon it, is similarly heated in the subliming tube, it is easy to prove the presence of both metals in the sublimate formed; for instance, distilled water boiled in the tube, repeatedly, dissolves the arsenious acid from the oxide of antimony, arsenious acid being discoverable in the solution by the ammoniacal nitrate of silver, the ammoniacal sulphate of copper, and sulphuretted hydrogen; and then dilute solution of potash boiled in the tube dissolves the remaining oxide of antimony, the presence of it in the potash solution being discoverable by the orange red precipitate again resulting after filtering, acidulating, and passing sulphuretted hydrogen.

Thus far my object was attained, to the extent of being able to abandon the use of the permanganate, without substituting any other oxidising salt; but it will be observed that I had to make two heating operations—one, the heating of the dry coated copper, and the other, the boiling to dissolve the oxide in the alkaline solution. Though two heating operations are not particularly objectionable, yet I felt desirous of obviating the necessity of more than one; and a few trials showed that the object may be practicably and conveniently effected. Thus, copper coated with antimony is put into a tube, and a very dilute solution of caustic potash is added. (a) The solution is boiled with the copper in it; and then the tube is so inclined that the copper slips out of the solution (or it may be drawn out by a copper wire) into the part of the tube where the solution is not, and allowed to remain there for a few seconds or a minute or two; after which it is returned into the solution (kept boiling hot) for a minute or two, when it is again caused to be out of the solution and in the air in the tube for a short time. This alternate immersion of the copper in the boiling liquid and the exposure of it to the air, is frequently repeated till the colour and altered appearance of the copper inform us that the antimony has been oxidised and dissolved off it. The solution is then filtered, acidulated with pure hydrochloric acid, and subjected to the action of sulphuretted hydrogen gas, when the true orange red sulphuret of antimony precipitates, as in the other instances. By the exposure of the coated copper alternately to the hot solution and (while itself warm) to the air, the oxidation and solution of the antimony go on rather quickly; so much so, indeed, that only from a few minutes to about half an hour is required for the solution of the whole of the antimony; the length of time, between these limits, varying according to the density and quantity of antimony upon the copper.

By the exposure of copper (coated with antimony) made wet with cold solution of potash, and exposed to cold atmospheric air, a similar effect is produced; but the time required for the complete change is too long for the operation in the cold to be made available in preference to that in which heat is applied. In an experiment made in the cold, not more than half of the antimony was dissolved in thirty hours.

My attention was next turned to experimenting upon copper coated with arsenic. I exposed some alternately to the action of boiling dilute solution of potash and to air in a tube; and, as might be expected, the arsenic became oxidised, and dissolved in the solution. It, however, was not converted merely

into arsenious acid, but into arsenic acid; for, after filtering the alkaline liquor, I slightly acidulated a portion of it with diluted nitric acid, and then added caustic ammonia till rather in excess; after which I evaporated to dryness, dissolved the dry residue in a few drops of water and tested with nitrate of silver, which gave the brick red precipitate, indicative of arsenic acid. I acidulated the other portion of the alkaline liquor with hydrochloric acid, and then passed sulphuretted hydrogen gas, which did not immediately cause any yellow precipitate, but in a few hours I observed that a light yellow precipitate was slowly forming, and in twenty-four hours a considerable quantity of a bright lemon-yellow precipitate had fallen and covered the bottom of a half-ounce phial, in which I had corked the liquor up to keep in the sulphuretted hydrogen and exclude atmospheric air. The slow formation of the yellow precipitate confirmed the nitrate of silver test in showing the metal to have been converted into arsenic acid.

This fact, of the conversion into arsenic acid, can be taken advantage of in separating antimony from arsenic when both have been deposited on copper by Reinsch's process. What is required is to oxidize and dissolve the mixed deposit by the alternate action of boiling dilute solution of potash and exposure to the air in the tube, then to filter the solution, acidulate it, and pass sulphuretted hydrogen gas through it; and as soon as the orange precipitate of antimony has begun to collect itself together and settle, to take out this antimonial precipitate by filtering, setting aside the clear filtered liquor in a corked phial, whereby, in some hours, the bright yellow sulphuret of arsenic falls.

When the deposit of antimony or arsenic is so thick as to readily crack off and not adhere to the copper, I think it is preferable to pursue the method in which the two heating operations are required; or else to adopt Dr. Odling's permanganate process; for if the deposit falls off the copper in scales or films when in the alkaline liquor, I do not find it practicable to pass the scales or films alternately out of and into the liquor as required. It, however, generally happens that in those instances when the greater part of the deposit does fall off, still a sufficient quantity adheres to the copper to allow some of it to be dissolved, and its character proved.

In a case of poisoning which I have had to attend to since the commencement of this year, I have submitted copper coated by Reinsch's process (in the examination of various portions of viscera), to the action of permanganate of potash, &c., as directed by Dr. Odling's discovery; and I have also submitted other portions of copper, coated at the same time from the same viscera, to the several other methods of oxidising and dissolving the coating in potash solution herein described; and in each instance obtained the true orange red precipitate, proved to be the sulphuret of antimony by dissolving it in strong hydrochloric acid, and thereby producing a solution, one part of which when diluted with water gave a white precipitate soluble in solution of tartaric acid; and the other part of which when introduced into Marsh's apparatus, along with zinc and diluted acid, yielded deposits of metallic antimony, on porcelain and glass, not soluble by the addition of chloride of lime or of a mixture of chloride of lime and acetic acid.

I feel that I ought not to conclude this paper without expressing thanks to my friend Dr. Taylor, of Guy's Hospital, for the kind intimation he has made to me that, when only a small quantity of arsenic is obtained along with a relatively large quantity of antimony from viscera into which these metals have entered by absorption, a serious question arises as to whether the small quantity of arsenic may not have been accidentally introduced as an impurity in tartar emetic; saying that, within the past few years, he has met with this in so many instances that the fact is calculated to create alarm; and that a maker has informed him that arsenical sulphuric acid (the acid made from pyrites), is sometimes used in forming the sulphate employed in the manufacture of tartar emetic. This being so, there are two possible sources whence arsenic in tartar emetic may be derived,—one from the antimonial ore used, and another from the sulphuric acid. It is quite time that such general use of the impure sulphuric acid for pharmaceutical purposes should be prohibited; and I cannot but direct attention to the facts mentioned in a paper of mine, "On detecting the presence of arsenic," published fifteen years ago, in the sixth volume, new series, of the memoirs of the Manchester Philosophical Society, and copied into the

(a) The coated copper must be previously well washed with water, and then a solution, 100 grain measures of which have an alkaline action equal to one third of a grain of potash, is sufficiently strong, when the copper is not thickly coated.

Medical Gazette of June 17, 1842. I therein stated, that I had detected arsenic in sulphate of potash and also in alum, made, by the aid of pyrites, sulphuric acid; and I suggested the probability that food might, consequently, in some instances, be contaminated with arsenic, as alum is often used by bakers in the making of bread; remarking, also, that vinegar is often adulterated with sulphuric acid.

The Folds, Bolton-le-Moors, May 7, 1857.

ON PLASTIC OPERATIONS

FOR THE

RESTORATION OF THE LOWER LIP,

AND FOR THE RELIEF OF SEVERAL DEFORMITIES OF THE FACE AND NECK.

By THOMAS P. TEALE,

Surgeon to the Leeds General Infirmary.

(Continued from page 590.)

Case 4.—John Leach, aged 11 years, was admitted into the Leeds Infirmary in April, 1855. He had been mutilated many months before in various parts of the body by burns occasioned by an explosion of fire-damp in a colliery.

The chin was bound down to the sternum in such a degree that he stood or sat in a bent position with the face directed to the ground. The lower lip was everted and drawn down to the lower edge of the chin; the saliva could not be retained; both lower eyelids were everted and drawn low down over the cheeks; the upper eyelids were everted and drawn upwards, their ciliary border being bound to the superciliary ridges, where all traces of eyebrows had been destroyed. Vision was nearly lost from a dense central opacity and haziness of the cornea, resulting from inflammation caused by the continued exposure of the part to the air.



John Leach, April, 1855.

the subjacent fibrous tissue being freely divided, a portion of skin as free from scar as could be obtained from the upper part of the chest was placed in the gap.

April 30.—The operation on the lower lip was performed. The incisions healed rapidly, and the patient was allowed to return home for a few weeks.

July 25.—The operation, already described, for restoration or rather replacement of the upper eyelids, was performed. An incision parallel to the ciliary edge, and about three lines above it, was made over each brow, the eyelid on each side was freely separated from the brow, and a piece of skin somewhat scarred was transplanted from each temple. These flaps formed a perfect union in their new places, and the eyelids were restored to their natural position.



John Leach, November, 1856.

August 30.—A similar operation was performed on both lower eyelids, but the transplanted material, being only dense scar of low vitality, sloughed on each side to a considerable extent.

In November, 1856, when the photograph was taken, the head had been so much released that he sat and walked erect, being no longer bowed down by the bands in front of the neck. The upper eyelids, after the lapse of a year and a half, were of their natural appearance, and moved freely over the eyes. Although in the operations on the lower eyelids the transplanted material partially sloughed, yet some little diminution of the eversion resulted from them. The protection, however, which the restored upper lids gave to the eyes was sufficient to have relieved the ophthalmia which before had been permanent; the haziness of the cornea had ceased to exist, and small central scars which did not completely obstruct vision only remained. So far indeed was his sight improved that he was able to walk about the crowded streets of Leeds unattended. The lower lip was of good form, and the saliva was perfectly retained.

April 5, 1855.—The strong bands in front of the neck and

Case 5.—William Bradley, aged 12 years, was admitted into the Leeds Infirmary on account of deformities of the face



William Bradley, June, 1856.



William Bradley, November, 1856.

and neck, caused by a severe burn. Several bands of scar extended from the chin to the sternum, but they did not much

interfere with the movements of the neck. The lower lip was everted, and drawn down to the edge of the chin, exposing the teeth and gums. The upper lip was much contracted and everted, forming only a narrow band beneath the nose, leaving the upper teeth and gums completely exposed. The right lower eyelid was everted, and drawn far down over the cheek. The saliva was constantly dribbling away.

July 5, 1856.—The operation for restoration of the lower lip was performed.

July 26th.—The right lower eyelid was restored to its natural position by the operation already described.

August 15th.—The operation by crucial incision and dovetailing of the lateral flaps was performed on the upper lip.

In November, 1856, when the photograph for the accompanying engraving was taken, the upper and lower lips, and the right lower eyelid, performed their functions. The saliva no longer dribbled from the lips.

Case 6.—Elizabeth Clarke, aged 31 years, was admitted into the Leeds Infirmary on account of deformities following a severe burn when she was nine years old. When admitted into the Hospital her neck showed several bands of scar; the lower lip was drawn down to the bottom of the chin; the lower front teeth were nearly horizontal, and their free edges, from long traction of the scars on the neck, were three-quarters of an inch in advance of those of the upper jaw. Her articulation was very indistinct, and she was much distressed by the involuntary and constant discharge of saliva.



Elizabeth Clarke, November, 1856.

November 12, 1856.—Six of the lower front teeth having been previously extracted, the operation for restoration of the lower lip was performed. She left the Hospital six weeks after its performance.

April 16, 1857.—The photographic original for the accom-

panying engraving was taken this day. The patient had a good lower lip, and perfectly retained the saliva.



Elizabeth Clarke, April, 1857.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

STATISTICAL REPORT OF THE PRINCIPAL OPERATIONS PERFORMED DURING THE FIRST QUARTER OF 1857.

(Continued from page 594.)

THE subjoined Report includes, as usual, the following Hospitals:—University College, King's College, St. Bartholomew's, St. George's, Guy's, St. Thomas's, the London, the Middlesex, the Westminster, Charing-cross, St. Mary's, the Metropolitan Free, the Marylebone, the Hospital for Sick Children, and the "Dreadnought" Seaman's Hospital.

LIGATURE OF ARTERIES.

Case 1.—Guy's: Mr. Cock.—In this case the radial was tied in two places, on account of a false aneurism. Did well. (See *Medical Times and Gazette* for June 6, p. 563.)

Case 2.—Guy's: Mr. Hilton.—In this case the two ends of the peroneal artery were tied, it having been wounded by a deep puncture. The patient, a healthy man aged 39, recovered well.

Case 3.—Guy's: Mr. Hilton.—A feeble man, aged 25, was admitted on account of having wounded the radial artery with a chisel. Both ends were tied. Sloughing of the skin and repeated abscesses in the forearm followed, and the recovery was slow.

Case 4.—The London.—A woman, aged 57, in poor health, was admitted on account of a wound of the palmar arch from a scissor blade. Pressure was first made on the spot, but this failing, the arm was kept forcibly flexed at the elbow, so as to control the bleeding. On the fourth day, the wound in the palm having assumed an unhealthy appearance, it was necessary to allow the arm to remain in the straight position; and, as the bleeding was then again resumed, it was determined to

tie the brachial artery. The operation was performed by Mr. Sharman, the House-Surgeon. All did well afterwards, and the wound in the palm quickly healed.

TREPHINING OF THE SKULL.

Case 1.—Guy's: Mr. Poland.—A man, aged 20, was admitted with a compound fracture of the left parietal bone from a severe blow. There were no symptoms of compression; but, as a portion of bone was found to be depressed, it was deemed best to operate. Hey's saw was used, and a fragment of bone which had been depressed about a quarter of an inch was elevated. The dura mater had not been injured. The recovery was not interrupted by a single bad symptom.

Case 2.—The London: Mr. Wordsworth.—A woman, aged 36, was admitted on account of a fracture of the right frontal bone, inflicted by a blow from a hammer three days previously. No symptoms had been developed until the day of admission, and after the accident she had walked about as usual. On the morning of her admission, she had become insensible, and repeated slight convulsive seizures had occurred. The trephine was used, and two portions of the inner table, which had pressed on the dura mater, were taken away. The fracture was not larger than the size of the small hammer-head by which it had been inflicted, and was what might be called "a punctured fracture." Very little relief followed the operation, and death took place forty hours after it. At the autopsy intense inflammation of the membranes of the brain was found.

Case 3.—The London: Mr. Critchett.—A healthy man, aged 35, was admitted after having received a blow on the head. The symptoms were at first those of concussion only, but two days later they had developed into those of marked compression. The trephine was now applied over the situation of the middle meningeal artery. A large clot was found between the dura mater and skull. It was removed, and profuse hæmorrhage followed. The artery was much lacerated, and was with difficulty controlled. Consciousness returned after the operation, and continued up to the time of death, which took place on the twentieth day afterwards. There had been paralysis of the right side for a week before death, and a free incision into the brain, in the hope of evacuating matter, had been made, but without relief. No autopsy was permitted.

LITHOTRITY.

Number of cases, 3; recovered, 1; died, 2.

Case 1.—St. Bartholomew's: Mr. Skey.—A man, aged 33, in good health; for three years subject to the symptoms of stone. Lithotritry was performed for the first time on March 14, and it was repeated on the 17th. Chloroform was not used. Several days after the second crushing a piece of stone got impacted in the membranous urethra, and lacerated the mucous membrane. An abscess formed, and the symptoms of vesical irritation were such as to make it seem best to perform lithotomy. This was done on April 10, when a whole calculus was removed, together with a number of fragments. Profuse hæmorrhage attended the operation, but the man rallied well, and progressed favourably until the wound was all but healed. Some small fragments which had remained in the bladder now again got impacted, and a second incision in the perinæum was necessary for their removal. The hæmorrhage was again unusually free. After this several abscesses formed about the urethra, leaving fistulous canals. The man sank into a very feeble state, and death took place on May 1.

Case 2.—Guy's: Mr. Birkett.—A healthy man, aged 37. Admitted with a large stone in the bladder. Treatment by lithotritry was commenced in December 8, and continued till March 26, twelve operations having been performed. Chloroform was not used. On the last occasion a large fragment was broken, and the pieces were soon afterwards passed. All symptoms having ceased, and no stone being discoverable, he was discharged well in April.

Case 3.—St. George's: Mr. Prescott Hewett.—A man, aged 62, apparently in good health. The stone was easily found, and was of large size. Lithotritry was adopted on account of the patient's positive refusal to submit to lithotomy. The stone, which proved to be very soft, was crushed five times at the first sitting. On the third day afterwards symptoms of pyæmia developed themselves, and death followed a week later. At the autopsy three large unbroken calculi were found in the bladder, together with much detritus of the one which had been crushed. Altogether the stones weighed more than two ounces.

GUY'S HOSPITAL.

CASE OF HYDATID TUMOUR OF THE LIVER,
WHICH DISCHARGED ITSELF INTO THE
ALIMENTARY CANAL.

Under the care of Dr. G. OWEN REES, Guy's Hospital.

The following case of hydatid tumour connected with the liver is of especial interest in relation to a series of like cases which we published in this journal a few years ago. Vide *Medical Times and Gazette* for 1855, vol. i. pages 114 and 159. The reader who is interested in the subject will also find, in the Guy's Hospital Reports, vol. vi. Series II. p. 17, some cases in which puncture of the cyst was practised, ably recorded by Dr. G. O. Rees.

We may remark with regard to the present case, that in its early stages there was some difficulty in arriving at a correct diagnosis of the nature of the tumour. The suggestions of malignant disease, of hepatic abscess, and of hydatid cyst were severally made, and taking the history as the only guide, it seemed quite as likely to prove one of the former as the latter. Its size, however, was more in accordance with its being hydatid, and as such Dr. Rees was throughout inclined to regard it. The expectoration of a portion of hydatid at length cleared up all doubt. In its consequences and final event it well illustrates the more usual termination of such cases, when not interfered with surgically. The extensive disease of the organs adjacent to it had, no doubt, been produced by its pressure upon them, and the most instructive lesson to be learnt from it is, as Dr. Rees remarked to his class, the propriety of early external puncture, whenever the circumstances of the case permit of its performance.

The case already referred to as published by Dr. Rees, resulted in perfect recovery after puncture. A very instructive one, in which a like result was obtained by the same means in the hands of Mr. Cock, was recorded about a year ago in our Hospital reports.

(Case reported by Mr. MACKENZIE BACON.)

W. M., aged 29, a married man living at Twickenham, was admitted, September 27, 1856, into "Stephen" Ward. Has been of steady habits, and not accustomed to drinking either beer or spirits. Has enjoyed good health till about nine years ago, when he began to suffer from occasional "bilious attacks" of a few days' duration. Five years ago he had a severe attack of jaundice, with bilious vomiting and pain in the right lumbar region. He recovered in about three weeks. After this he remained well till a year and a half ago, when he was laid up for a month with small-pox. He then enjoyed good health till four months ago, when he noticed that though his appetite was ravenous, he nevertheless lost flesh, and seemed to be getting weaker. He did not suffer any pain, however. After being in this state for two months, he was seized with a violent griping pain in the side, extending upwards from the stomach; and on the following day he became very much jaundiced. In the course of three or four weeks he got better, and was able to get out of doors, when he had a recurrence of the violent pain in the region of the liver, which confined him to his bed. Up to this time he had not noticed any swelling at all, but his Medical attendant after this second attack discovered one of some size in the region of the liver, which was painful at only one spot, viz., in the lumbar region on a level with the umbilicus. At this time he was taking mercury, blisters had been applied, and iodine painted on the part, and the bowels were made to act two or three times a day. The motions were light-coloured, the urine turbid and high-coloured, and the appetite variable.

On admission a large tumour could be felt extending from the liver to the seventh (left) rib, and downward below the umbilicus to the first lumbar region, the edge being well defined below. The abdomen was tense and painful, and the tumour said to have been gradually increasing since it was first noticed. The patient was much emaciated, the face sunken, and the skin rather jaundiced. Cannot sleep at night. The urine was in average quantity, loaded with lithates, and presented the deep brandy colour so characteristic of hepatic disease.

The treatment at first was merely palliative, some ammonia being given three times a day, and some castor oil and opium once or twice to relieve pain and open the bowels, good diet with porter being allowed the patient. Nothing worthy of note occurred for a fortnight, the tumour appearing to increase if anything, and

the constitution not suffering much; when on October 14 he vomited suddenly and without effort about four ounces of pure pus, at the bottom of which was discovered an entire hydatid cyst. The next day some hydatids were discovered in a motion passed without the aid of medicine. The abdomen was less tense after this, and the man experienced considerable relief. His diet was now increased, and wine allowed.

From this date he continued to pass hydatids in the fæces till the 21st, after which no more were seen. The strength of the patient did not seem much diminished, though he began to suffer from a bed sore. The sore, however, healed soon, the amount of wine being increased, and a spring bed ordered. The abdomen was measured at the cartilages of the last ribs and over the crest of the iliac bones, the measurements being respectively 33 inches above and 32 below. Morphia was given at night with good effect. The patient had suffered occasionally since his illness from profuse sweats, which ceased soon after the evacuation of hydatids. The appetite now began to improve, and the nights were less restless, but the pulse was still over 100. About the 27th vomiting came on of a thickish fluid, in which were no hydatids, and which seemed to be undigested food. For the next week he brought up during the day more than half a pint of a viscid watery fluid, but this ceased after the exhibition of some magnesia and opium. The right lung, which had always been dull at the base, owing to its compression by the liver, now began to show signs of becoming affected; but, after giving rise to some anxiety, its condition improved, the cough and expectoration ceasing, and respiration became clear again. The tumour had been gradually decreasing, and at the end of ten days after the measuring of the abdomen it had diminished by three inches in each region. The appetite now became very good, the patient slept well, suffered no pain, and felt pretty well; but the emaciation was extreme, and he could not even support himself in bed, owing to extreme debility. He had not taken any medicine for some time, attention being chiefly directed to his appetite. During the second week in December the man was able to get up and walk about the ward, and was somewhat improved in general health. He left the Hospital shortly afterwards, but was not then in a state at all fitting him to return to his occupation.

The man left Guy's January 7, 1857, and returned to his home at Twickenham. For about a month he continued in the same state, but soon after began to experience pain over the region of the liver, and to suffer constitutionally, becoming greatly emaciated, and hardly able to get about. He came under the care of a very able Medical man in the neighbourhood, who gave him opiates for his relief, and tried various tonics. After remaining some weeks with no relief of his symptoms, he was suddenly seized in the night with collapse, and though all remedies appropriate were given, died at the end of ten days from peritonitis, etc.

A post-mortem examination was made on the second day. The appearances observed were as follow:—The cavity of the abdomen was occupied by a large quantity of serous fluid, in which floated shreds of lymph in great amount. The liver, stomach, colon, and diaphragm, were all matted together by adhesive inflammation, and between the liver, colon, and stomach, in a sort of cavity, was found a collection of pus, evidently the original seat of the hydatids, and some of the pus had escaped into the abdomen, giving rise to the fatal peritonitis. On removing the liver and making sections of it, several distinct abscesses were seen in its structure. The right kidney was partly destroyed by suppuration, the pelvis being quite exposed, and presenting an honeycomb appearance. The left kidney was much enlarged, to compensate for the loss of the other. The right lung was adherent at the base, otherwise healthy. No tubercular deposits.

UTERINE HÆMORRHAGE—TRANSFUSION OF
BLOOD — TEMPORARY RECOVERY — DEATH ON
THE FIFTH DAY.

(Under the care of Dr. LEVER and Mr. BRYANT.)

(Reported by Mr. BENKELEY.)

Jane S., aged 45, married, residing at Deptford, was admitted May 20, 1857, under the care of Dr. Lever. Ten years ago she first suffered with severe pain in her back and loins; seven years since, she first had a severe attack of hæmorrhage, which has frequently recurred. She was not aware, however, of any tumour until twelve months ago, when she

became an out-patient at Guy's. For the last five months she has had repeated profuse attacks of hæmorrhage, with constant bearing-down pains. Three weeks since she first experienced severe pains of an expulsive character; these became very much more serious on the night of Sunday, May 17, when a large growth passed downwards and protruded through the vagina.

It was about the size of a bullock's heart, fibrous in texture, and highly vascular, attached to the uterus by means of a long thick pedicle. She at the time lost about three lbs. of blood. Dr. Cargien, of Rotherhithe, was called, and recommended that Dr. Lever should be sent for. On his arrival he applied a ligature to the growth, external to the vulva, and recommended that she should be brought to Guy's as soon as she could be removed.

On admission she was perfectly blanched and extremely prostrated, with a small, quick pulse, thickly-furred tongue, and scarcely any appetite. A Gooch's canula was passed into the vagina, and the growth was again ligatured higher than the first ligature.

On the 21st she vomited incessantly, and appeared very low and feeble, the discharge from the growth being excessive; it was accordingly excised at the seat of the first ligature, the canula still being left attached. From this time to the 30th, she appeared gradually to be losing power, vomited constantly, and took scarcely any food by the mouth, (beef-tea and port wine injections were administered twice a-day,) with a thick, furred tongue; pulse ranging between 80 and 110, very feeble. On the 30th the ligature came away. She had passed a very bad night, and appeared excessively feeble. Dr. Lever called in Mr. Bryant in consultation, and transfusion was determined on, which was then performed with the ordinary transfusion apparatus, the blood being given by one of the students. About six ounces were injected, and small quantities of wine were administered several times during the operation. The patient's pulse, which before the operation ranged between 120 and 135, was reduced to 90, and became much firmer. She fell asleep shortly after the operation, and passed a very good night. From this time she improved gradually, for the next four days being quite free from sickness, and taking small quantities of food. On the evening of the fourth day her powers again diminished slightly, and she died the following day at 2 p.m.

Autopsy.—All the tissues and organs were found excessively anæmic and fatty. The peritoneum on the surface of the intestines near the pelvis was slightly inflamed; the pelvic tissues were in a suppurative condition, as well as the bladder and uterus. The liver was enlarged and very fatty, the kidneys were in a suppurative condition, and there was a large suppurating clot in the external iliac vein.

NOTES AND QUERIES.

He that questioneth much shall learn much.—Bacon.

No. 210.—A GOOD PHYSICIAN.

Handsels not his new experiments on the bodies of his patients,—letting loose mad receipts into the sick man's body, to try how well nature in him will fight against them, whilst himself stands by and sees the battle.

To poor people he prescribes cheap but wholesome medicines,—not removing the consumption out of their bodies into their purses; nor sending them to the East Indies for drugs, when they can reach better out of their gardens.

He brings not news, with a false spy, that the coast is clear, till death surprises the sick man.—I know Physicians love to make the best of their patients' estate. First, it is improper that *adjutores vitæ* should be *nuncii mortis*; secondly, none, with their good will, will tell bad news; thirdly, their fee may be the worse for it; fourthly, it is a confessing that their art is conquered; fifthly, it will poison their patients' heart with grief, and make it break before the time. However, they may so order it, that the party may be informed of his dangerous condition, that he be not outed of this world before he be provided for another.

Unworthy pretenders to physic are rather foils than stains to the Profession.—Well did the poets feign Æsculapius and Circe brother and sister, and both children of the sun; for,

in all times (in the opinion of the multitude), witches, old women, and impostors have had a competition with Physicians (Lord Bacon, "Adv. of Learning"); and, commonly, the most ignorant are the most confident in their undertakings, and will not stick to tell you what disease the gall of a dove is good to cure. We took himself to be no mean doctor, who being guilty of no Greek, and being demanded why it was called hectic fever: "Because," saith he, "of an hacking cough which ever attendeth that disease."—*Thomas Fuller, ed. Rogers.* J. D.

No. 211.—FEBRIFUGE PROPERTIES OF RASPBERRY LEAVES.

Can any of our readers give information as to the ovifuge properties of the leaf of the common raspberry? We have heard a report that its specific action on the uterus is as powerful as that of the ergot of rye, much more easily regulated, and followed by no unpleasant secondary consequences. Suffolk, June 9. W. B.

ANSWERS.

To No. 209.

I beg to furnish your correspondent, Mr. Maysmor, with the following particulars of Sir John Baptista Silvester. The name of the worthy knight will be found among the permissi in the list of the College of Physicians in the Pharmacopœia published October 5, 1787. He was born at Bordeaux—date uncertain; practised as a Physician for many years with great reputation at Hackney, and was knighted by George III., by whom he was greatly esteemed. He was proud of his ancestry, and on his receiving the honour of knighthood refused to allow any change to be made in his armorial bearings at the Herald's College. He was the father of the late Sir John Silvester, Recorder of London. I am, &c.

HENRY R. SILVESTER, B.A., M.D. Lond.

Clapham, June 8, 1857.

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Medical Times & Gazette.

SATURDAY, JUNE 20.

THE DETECTION OF STRYCHNINE.

In an article addressed to our readers about this time last year, in consequence of the trial of the Rugeley murderer, we endeavoured to mark out briefly the facts which were then known in relation to the chemical and physiological properties of strychnine, and also to indicate the points which appeared worthy of further examination. In addition to this, we noticed some of the speculative views that were then beginning to be promulgated, and carefully laid down the manner in which they should be investigated, with the precautions which it behoved those busied in such labours to observe in forming any conclusions. We further intimated the spirit of cautious hesitancy which would influence us in giving publicity to fresh information that might have a most important social bearing; and, knowing well the unfavourable, though unfair, impression produced upon the mind of the people by the one-sided way in which the medical testimony had been marshalled by the counsel respectively

engaged in fixing or rebutting that notorious criminal charge, and clamorously struggling more for victory than justice, we were anxious to find an opportunity of showing, by some contrasting instances, the quiet, unpretending manner in which our men of science are accustomed to trace out the filmy threads of Nature's secrets, and then lay the results of their under-surface toils upon the shrine of the commonweal, with the self-forgetfulness of a devotee, and the contentedness arising from a sense of duty done.

Many men have since been working with zeal and diligence to open out this obscure subject; but, while honouring all for their motives and such knowledge as they have been enabled to contribute to the general stock, it so happens that circumstances have placed us in a position to watch more closely and continuously the proceedings of, among others, Messrs. Rodgers and Girdwood. These gentlemen have endeavoured to fulfil the conditions we felt ourselves justified in demanding before giving an assent to any conclusions; and it is with satisfaction that we proceed to report, in great measure as eye-witnesses, an outline of their experiments and results, without, however, pledging ourselves to maintain the absolute correctness of the inferences drawn from them. We know, indeed, that grave objections may be taken to some of the material points. These we shall examine more especially in a future number. Our express purpose now is, by giving an exposition of the actual condition of this serious controversy, to stimulate to fresh efforts for its final settlement before another occasion arises for the public exposure of professional differences, which only require due scientific diligence for their determination.

The questions presenting themselves for solution were these: Can strychnine be detected after death, when it has been administered in a dose only sufficient to destroy life? or is it so altered in the process of destruction of life, and subsequent decomposition of the tissues, as to cease to be strychnine? The answer of Messrs. Rodgers and Girdwood to these questions is contained in the following summary of conclusions, derived from an extended series of experiments:—

1. That the opinion that strychnine can only be detected when the poison is in excess, is untenable, and not supported by trustworthy analyses.
2. That the opinion, that strychnine is decomposed in the process of destruction of life, has no better foundation.
3. That strychnine can always be detected, when it has occasioned death, in the blood, organs, and tissues of the body, quite independently of the contents of the stomach.
4. That it is found unchanged in the urine.
5. That the delicacy of the reactions of strychnine, and its extraordinary stable qualities, render its detection more certain than that of any other poison.

These results are based upon experiments, of which the following are illustrative examples:—A rabbit was poisoned by five successive doses of strychnine, each containing $\frac{1}{30}$ th of a grain. Death followed in about three hours after the first dose, and within half-an-hour after the administration of the last; only $\frac{1}{6}$ th of a grain was given altogether. The contents of the stomach yielded strychnine in abundance. Half-a-pound of the flesh did the same. It was also discovered in the bones and in the urine.

The blood and contents of the stomach of a dog poisoned by 2 grains of strychnine were, after putrefaction, subjected to analysis, both yielding strychnine.

The muscles, viscera, and bones of a dog poisoned by a grain of strychnine, were separately subjected to analysis, thirteen months after interment. Strychnine was discovered in every instance.

The viscera, and contents of stomach, of a rabbit poisoned by $\frac{1}{4}$ a grain of strychnine and 5 grains of tartar emetic,

yielded antimony and strychnine also in each analysis. The body of this rabbit was allowed to decompose, in contact with air, for nine months. When dry, the bones separated, and although the other tissues were almost pulverulent, no difficulty was found in showing the presence of strychnine.

The essential conditions of the process by which these results are arrived at by Messrs. Rodgers and Girdwood, are—that it should be capable of disintegrating the substances in which the strychnine is present so completely that it cannot escape solution, and that it should leave the strychnine in a state of perfect freedom from foreign organic matter. These conditions have not been secured by previous experimentalists. Hence their contradictory statements.

The process itself is as follows:—The substance to be operated upon is digested with dilute hydrochloric acid, 1 to 10, until it is apparently fluid; the liquid is then filtered and evaporated to dryness over a water-bath; what remains, treated with spirit as long as anything can be dissolved, and the filtered tincture evaporated as before. The residue must now be dissolved in water and filtered.

This aqueous solution is to be rendered alkaline by ammonia and agitated in a bottle, or long tube, with about $\frac{1}{2}$ an ounce of chloroform. After subsidence, the chloroform is drawn off by means of a pipette, transferred to an evaporating basin, and expelled over a water-bath; the residue left on the basin must then be moistened with concentrated sulphuric acid, and exposed for some hours to the temperature of a water-bath, by which proceeding, all organic matter except the strychnine is destroyed. The charred mass is then treated with water, and the solution filtered to separate the carbon; excess of ammonia is added, and the solution again agitated with about 1 drachm of chloroform. If, on evaporating a small portion of this chloroform solution, and acting upon the residue with concentrated sulphuric acid, any charring takes place, the foregoing process must be repeated.

The chloroform solution now obtained will afford strychnine sufficiently pure for conclusive testing. For this purpose, a small quantity is taken up in a capillary tube, and evaporated by adding successive drops, on the smallest possible space of a warm porcelain capsule. If the quantity of strychnine in the solution is large, say the $\frac{1}{2000}$ of a grain or more, the method pursued in using the re-agent is similar to that adopted by others, viz., moistening the spot, when the capsule is quite cold, with concentrated sulphuric acid, and then adding a minute fragment of bichromate of potash. When, however, the quantity is very small, no colour will be perceived by this mode of testing. Under such circumstances, sulphuric acid, rendered slightly yellow by chromic acid, is said to be found successful.

We may, in conclusion, enjoin a caution against two sources of failure in conducting this test. The common recommendation to stir the spot moistened with sulphuric acid, with a glass rod before the addition of the bichromate is to be avoided, because the acid sulphate of strychnine may so be removed altogether; and the operator must be careful not to expose the matter under examination to an intense light, as in his anxiety to watch the colour changes he is too apt to do, the effect of light, in more than moderate amount, being to suspend the chemical reactions.

We cannot exaggerate the importance of these statements to the Medical jurist; but we regard as of much more importance the extensive spread of information respecting the certain detection of this poison as a means of correcting a popular delusion that strychnine is an agent which the evil-tempted may employ with comparatively small risk of conviction. Let every one, in his sphere, do his part in the prevention of crime.

THE WEEK.

WE have received a communication from Dr. Churchill, of Brompton, on the subject of a letter addressed by him to the Governors of the Brompton Hospital for Consumption, but to which he has received no answer. The motive of the letter is to induce the Governors to allow Dr. Churchill the opportunity of testing the value of a secret remedy for Consumption, on terms somewhat similar to those made between Dr. Fell and the authorities of the Middlesex Hospital. Dr. Churchill alleges that he has discovered a remedy for this disease, which is as much a specific as quina for marsh fever, or mercury for syphilis; and he asks for the exclusive care of ten patients in the Hospital, to be selected by himself from either the in or out patients. If the remedy should turn out to be successful, or even should be considered superior to those already in use, Dr. Churchill promises to reveal its nature; but if the decision on its merits should be unfavourable, then Dr. Churchill is to be free to follow his own discretion as to revealing it. The letter to ourselves from Dr. Churchill contains a great number of truisms on the subject of the unsatisfactory nature of modern therapeutics, the necessity of encouraging original investigations in experimental science, and other matters of a similar nature; but there is nothing whatever in his arguments which can reconcile us to the idea of encouraging the use of *secret* remedies. We consider that it is quite unworthy of any member of our Profession to conceal from his fellow-practitioners and the public the nature of any remedial agent which he may employ in the treatment of disease; and experience has taught us (without making any reference to Dr. Churchill), that those who advocate or adopt such a practice are either actuated by unworthy motives of a personal and pecuniary nature, or that their supposed specifics have no real claim to attention. If Dr. Churchill have really discovered some mode of treatment which can arrest or cure pulmonary consumption, let him by all means make it known; and we feel convinced that the Governors and Medical officers of the Brompton Hospital will readily countenance any effort to mitigate the sufferings or prolong the lives of the patients; and the reward which will accrue to Dr. Churchill from the publication will be far greater than he could obtain by any secret mode of treatment. We can see no possible excuse for the adoption of any secret remedy, and commend the Governors of the Brompton Hospital for declining to entertain Dr. Churchill's suggestion.

It would appear that, notwithstanding the philanthropic labours of our countrymen to improve the condition of the lunatic in England and Ireland, very much yet remains to be accomplished; and we regret to find, by an extract from the *Freeman's Journal*, that some of the asylums in Ireland have not yet adopted the mild non-restraint system of insanity to such an extent as might be desired. Dr. Corrigan has brought before the Commissioners some cases of restraint he had discovered in going through the Armagh Asylum. One was of a patient who was four days and four nights strapped down in bed with wrist-locks, leg-locks, and body-straps. The manager stated he was aware the man was in bed for that time, but was not aware that he was under the restraint stated; there was no particular record of it, neither was there any record of the case of a woman with wrist-locks upon her, and strapped down in bed; this woman was subject to violent paroxysms. Another case was of a girl aged 19, in wrist-locks, strait waistcoat, without shoes or stockings, and who stated she had been kept in that condition for the period of two years. The manager stated that she was a most violent case, and that if at liberty would destroy all in the room. The moral of all this is—"More Medical inspectors of lunatics."

The Irish Apothecaries are strongly opposing Mr. Headlam's Bill, and have issued the following contrast of the provisions by which the two Bills propose to effect their avowed objects in England and in Ireland:—

"GOVERNING COUNCIL.

In Mr. Headlam's Bill.

To consist of twenty-three members; seventeen to be nominated by the Universities, Colleges, and Halls, six to be nominated by the Crown.

In Lord Elcho's Bill.

To consist of thirteen members, all to be appointed by the Crown.

UNIFORMITY OF EDUCATION AND QUALIFICATION.

By Mr. Headlam's Bill.

Education in England would be conducted by the three branches of the Profession respectively.

Education in Ireland would be conducted by only two branches of the Profession, viz. the Colleges of Physicians and Surgeons, excluding the Apothecaries' Hall of Dublin.

By Lord Elcho's Bill.

Education would be uniform, one sufficient standard being required to qualify for practice, and to be conducted by the three branches of the Profession respectively in England and in Ireland, including the Apothecaries' Hall of Dublin.

THE RESULT WOULD BE

By Mr. Headlam's Bill.

That the existing branches of the Profession which have been formed and adapted by time to meet the public wants, would be preserved in England, but sacrificed in Ireland, and perfect reciprocity thereby rendered impossible.

By Lord Elcho's Bill.

That the three existing branches of the Profession would be preserved in England and in Ireland, a properly qualified General Practitioner would be provided for the public wants in both countries, and a perfect reciprocity thereby established.

THE GENERAL REGISTER OF QUALIFIED PRACTITIONERS.

By Mr. Headlam's Bill.

A classified register would be formed, alphabetical, of Physicians, Surgeons, and Surgeon Apothecaries for England, and for Physicians and Surgeons only in Ireland; all extra titles and degrees would be ignored; the existing Apothecaries in England would all be registered, the existing Apothecaries in Ireland would all be left out of the registry.

By Lord Elcho's Bill.

A general alphabetical register would be formed, distinguishing each person according to his respective or several qualifications and titles, and registering equally the existing Apothecaries in England and in Ireland.

NATIONAL PHARMACOPŒIA.

By Mr. Headlam's Bill.

To be published by the Colleges of Physicians in the United Kingdom, under the direction of the Council elected by the Colleges.

By Lord Elcho's Bill.

To be published by the Council appointed by the Crown; the Council would be chosen from the most eminent Practitioners in every branch of the Profession."

We have received several communications on the subject of Dr. Horner, the new convert to homœopathy, and the Physicians to the Hull Infirmary, and one of these communications requires a short comment. The writer argues that Dr. Horner should have been allowed to try the homœopathic treatment as a contrast to that of his colleagues upon such patients as were willing to be treated by him, in order to show, as "Andral and Majendie had done in Paris," that the system, "which is certainly gaining ground in the north of England, is but an empty and fallacious thing." It would be far simpler for the Physicians to set aside certain wards in which patients were left to themselves, and contrast the results of doing nothing with those observed after ordinary Medical treatment. No man of common sense can believe that the globules of sugar of milk made up by the hundredweight in London, and sold from the same large jar under fifty different names in small bottles, can have any possible physical effect upon any patient,

whatever the effect on the imagination may be; or, that even if the phosphorus, or sulphur, or aconite really had been added to the mixtures before infinitesimal dilution, the globules are anything more than sugar of milk. It would be far better to impress this truth on the public than to consent to any apparently serious trial of a system only deserving of ridicule.

We are happy to publish the following extract from a letter just received from one of the members of the deputation to Lord Palmerston in support of Mr. Headlam's Bill:—

"Upon the occasion of the deputation to Lord Palmerston, two gentlemen addressed me personally in the hall of the house, and asked if they might be present at the interview, to report for the *Times* and some other newspaper. I replied that I would make inquiry, and that we should be very glad if every publicity were given to the proceedings. Upon asking of Lord Palmerston's head servant whether the gentlemen reporting for the press might attend, he replied, that he had Lord Palmerston's orders that reporters were not to be allowed to be in the room. This information I communicated to the two gentlemen in the hall, and gave my name to them; but they desired to have the statement from Lord Palmerston's own servant. Upon receiving a similar reply to their request from his Lordship's servant, they hastily left the hall. I am happy to say, however, that two gentlemen, quite independent of the bodies represented by the deputation, were admitted into Lord Palmerston's reception-room, and those gentlemen took down copious notes of all that was said and done."

After this statement the deputation from the Corporations must be entirely exonerated from the charge of avoiding a public report of their interview. This charge would not have been credited at all had not the secrecy observed in the early stages of the measure thrown an air of probability over the report of secrecy in its later progress. The present state of the two Bills may be given in a few words. On Wednesday, the 1st of July, Mr. Headlam's Bill is the first on the orders of the day for the second reading. It is generally believed that Lord Elcho's amendment—that it be read this day six months—will be carried. If so, the second reading of Lord Elcho's Bill will come on, and it is known that some members of the Government will support it. If the opposition of the Corporations prove too strong, it is expected that Mr. Cowper will prepare a Bill on the part of the Government for the next session; but that if the Universities and Corporations can reconcile their differences, Lord Elcho's Bill, somewhat modified in Committee, may pass during the present session. Some of the most evident objections to Mr. Headlam's Bill will be found in an able letter from Professor Laycock, of Edinburgh, in another column.

The Scottish Lunacy Bill, introduced by the Lord Advocate, will certainly require alteration in committee. "One Commissioner and a Medical Inspector" are certainly not enough hands to do the work. The attempt to save a few hundreds a-year has already brought deep and lasting disgrace on Scotland; and it will never do to constitute an imperfect Board now on the ground of "saving expense." The new Board must have a sufficient number of Medical members to do the work, and do it well.

We alluded a few weeks ago to the verdict of manslaughter against Mr. Morgan, for alleged midwifery malpractice. His trial took place on Wednesday at the Central Criminal Court, and ended in a verdict of acquittal, the judge very properly observing that the evidence did not even make out an error in judgment, still less such "gross negligence and want of skill" as would warrant a jury in returning a verdict of manslaughter against a Medical man under such circumstances. A number of witnesses were present, testifying to

the skill and humanity which had characterised Mr. Morgan's career, but their evidence was fortunately unnecessary. It is very painful to see members of our Profession so completely at the mercy of ignorant chattering women.

Some remarkable cases of suspected poisoning at Cleator Moor in Cumberland are now undergoing investigation. Six persons have died, and several others have been taken dangerously ill, and it is supposed that they have suffered from exhalations proceeding from the débris of the works of an Iron Company near their homes. As it is expected that Sir George Grey will comply with the request of the Coroner and Jury, and send some eminent toxicologists (Professors Brande and Taylor have been named) to assist in the inquiry, and give evidence at the adjourned inquest next Tuesday, we shall only say now that most of the symptoms observed during the life of the sufferers are consistent with what is known of the physiological action of sulphuretted hydrogen, but that the state of the blood found in their bodies after death was not that usually observed in animals poisoned by this gas.

A case of indictment for nuisance has this week occupied a jury for several days at Westminster. The cause of the nuisance was the operation of purifying charcoal employed in a sugar refinery at Whitechapel. It is well known that sugar is deprived of its impurities by animal charcoal, which absorbs the colouring and odoriferous matter. The nuisance in question was alleged to arise from the process of heating the charcoal to render it fit for use again. The evidence was very contradictory, several persons called for the prosecution having deposed that much illness was caused by the emitted vapour; while a greater number, called for the defence, declared that the operation was carried on without any injury to health. The chemical evidence was no less conflicting, Dr. R. D. Thompson declaring that sulphuret of ammonium, and a variety of offensive hydro-carbons, were evolved during the process; while Mr. Brande could find no trace of sulphuret of ammonium or anything else which could be a nuisance to the neighbourhood. Under such circumstances no doubt the judge, the jury, and the counsel had a very puzzling duty to perform; but the case ended by a verdict of Guilty against the defendants.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

A CASE OF GENERAL ANÆSTHESIA.

By Dr. KLAATSCH.

Dr. Klaatsch relates the case of a widow, aged 58, who applied to him on account of severe pains in the extremities, and a powerless state of the upper ones, which prevented her from grasping any object firmly. She also complained of an unrelievable sense of hunger. In other respects, with the exception of occasional headaches, she was quite well; she had had nine children, still menstruated moderately, and exhibited no symptom of hysteria. A charwoman by occupation, she attributed her present symptoms to chills. An examination exhibited no appearances of paralysis, but the sense of feeling was lost over the entire skin and orifices of the mucous membranes, and could not be excited by pricking with needles. No unpleasant feeling was excited by irritating the nares, the conjunctivæ, or the mucous membrane of the mouth, and the fumes of ammonia produced no effect upon the respiratory organs. Boiling water and a prolonged application of the electrical pencil alone induced some feeling on the surface. The sense of contact was retained, and she was enabled to exactly indicate the spots at which she had been pricked. The power of distinguishing between differences of

temperature was abolished, but the muscular sense remained, as she was conscious of the position of her limbs, and could determine the weight and size of a body by grasping it. The senses of taste and smell were lost, and both hearing and vision were somewhat defective, although she had not before observed diminution in their power. The reflex excitability was very slight, the rapid application of hot sponges exciting but slight movements; tickling the fauces did not induce any disposition to vomit.

After the patient had remained some time under observation, and her condition was found to be stationary, the Russian vapour baths were tried, but without any avail. The electrical pencil was next applied to the two forearms and the left side of the face; and after three *séances*, not only was feeling restored to these parts, but it was recovered also by the remainder of the surface and the mucous membranes; taste and smell were restored, and the sense of unappeasable hunger disappeared.

Most of the analogous cases on record have been observed in hysterical subjects; but in this one no symptoms of hysteria whatever were present.—*Deutsche Klinik*, 1856, No. 45.

ON MERCURIAL MUCO-ENTERITIS.

By Dr. BYFORD.

In Dr. Byford's opinion, the most constant evidence of the constitutional effects of mercury is inflammation of the mucous membrane of some portion of the alimentary tube. Although the most frequent locality of this specific inflammation is the mouth, it is not exclusively so; and in a vast number of cases in which mercury is given, with a view to its general effects, irritation of the bowels is produced before the gums are affected, or any metallic taste is perceived. This irritation is usually regarded as an immediate cathartic impression, or the purgative effect of super-secretion from the liver; but careful observation has induced the author to believe that both these are the effects of a specific mucous inflammation, analogous to that which takes place in the mucous membrane of the mouth. If the mercury be persisted in too long, this inflammation may assume a dangerous form; so that when there are copious serous stools, with burning pain in the epigastrium, or tenesmus, with frequent mucous and bloody stools, the medicine should be discontinued, as having produced its specific effect upon the organism. A continuance of the remedy, guarded by opium, after unequivocal signs of saturation, might lead to dangerous consequences. Dr. Byford has found this mercurial intestinal irritation of more frequent occurrence in persons who were difficult to affect by mercury, several days being required for the exercise of its influence. "The conclusions, to which I have arrived from considerable experience, are that the specific acute inflammation produced by mercury has its site, 1st, most frequently in the mouth; 2nd, very frequently in the lower portion of the colon and rectum; 3rd, not so often in the duodenum; 4th, situated in all these localities it may be combined with stomatitis or not; 5th, inflammation may be produced in any of these localities either by internal use or by inunction, and probably also by fumigation.—*American Journal of Medical Science*, April, page 313.

ON THE EMPLOYMENT OF AMYLENE.

By M. ROBERT, and others.

M. Robert recently read at the *Académie de Médecine* an interesting report of a commission composed of MM. Malgaigne, Lepeau, and himself, upon a memoir on amylene submitted to the Académie by M. Débout. The report states that Débout's paper offers nothing new upon the subject, but confirms the observations already published by Snow, Giralès, and Tourdes, establishing that amylene produces anæsthesia very speedily, without causing any painful sensation, inducing that desire to cough or expectorate so often derived in the employment of chloroform. "During the circ procedure," says M. Débout, "the pulse remains large, full, and very rapid, the respiratory movements are deep, the skin warm, the face highly coloured. In one word, there is absence of those signs which indicate that the new agent can readily exert any effect upon the phenomena of organic life."

The reporter, in order to judge of this favourable account of amylene, made a number of trials with it himself, employing Charrière's apparatus, which, by covering both nose and mouth, prevents a loss of the vapour. One of the remarkable properties of amylene being its slight solubility in the

blood, its vapour must be breathed in as concentrated a manner and as continuously as possible, under the risk of failing to produce insensibility, or of this being of too short duration. M. Robert believes that it is the want of observing this precaution, and from merely administering it on a sponge, that some Surgeons have failed altogether, or have had to employ very large quantities of amylene. He has employed it in 44 adults of both sexes. Most of the operations were but of short duration, such as opening abscesses or panaris, avulsion of nails, or amputation of toes; but some have been of a more important character, such as amputation of the thigh and arm, removal of the breast and the parotid gland, and extraction of a calculus from the prostatic portion of the urethra—this last requiring a quarter of an hour. In none of these cases was any irritation of the mucous membranes produced. Most of them were rendered insensible in two or three minutes, a few not until six or seven; while in three, after ten or twelve minutes' inhalation had been tried in vain, chloroform had to be resorted to. The agitation which so frequently precedes the action of chloroform was not observed. The countenance became more and more flushed. The eyelids remained widely open, and the fixed eyes were frequently carried upwards, beneath the upper lid. The head was thrown backwards, and sometimes the limbs became extended and stiffened. The pulse was very rapid, and, in one case, its intermittent and filiform character excited alarm. Respiration continued free, and the spasmodic closure of the jaws, with threatened suffocation, sometimes observed under chloroform, was never met with. It is an important fact, that amylene never gives rise to muscular resolution, and the insensibility it induces is of very short duration, unless the application be constantly repeated. After the operation, the restoration is rapid, the patient not continuing to suffer any uneasiness. Two young girls, however, exhibited a singular form of delirium, accompanied by sobbing and violent convulsive movements. One of them, subjected some time after to chloroform, exhibited the same symptoms. Thus, while amylene resembles ether and chloroform in its power of preventing pain, it differs from them in the rapidity and temporary duration of its action, and in not exerting any power on muscular contractility.

As to the question of danger, M. Robert observes that Dr. Snow's case has proved that, as in the use of chloroform, death may take place in consequence of a special predisposition of the economy of an unknown nature. The only question really is, whether there is less danger attaching to the employment of amylene. From various experiments he has performed upon animals, M. Débout concludes that there is; and he calculates that, if the dose of chloroform has to be doubled, to convert it from an anæsthetic into a toxic agent, that of ether has to be quadrupled, and that of amylene to be quintupled. The reporter, having repeated the experiments upon birds and rabbits, believes that this statement is accurate. Performing other experiments upon dogs, employing for that purpose a modification of Charrière's apparatus, he found that chloroform gave rise to the usual series of symptoms, from simple insensibility to complete muscular resolution, the animals always dying in the course of thirty or forty minutes. Under the use of amylene the same symptoms were observed as in man, but a relaxation of the muscles was never obtainable. Moreover, continuing the experiment, with the intention of killing the animals, these seemed to become habituated to its use, and recovered part of their sensibility. The inhalation was terminated at the end of an hour, and the animals soon began to walk, and were speedily restored. Having contrived an apparatus by which large quantities of amylene could be breathed in a concentrated form, the reporter at last succeeded in producing complete resolution of the limbs, and death followed in twenty minutes. While these experiments show that amylene is a much less powerful poisonous agent than chloroform, the reporter does not agree with M. Débout that it may, therefore, be more safely used in practice. It is, in fact, a leading point in the history of anæsthetics, that death has not supervened in man upon a successive and progressive evolution of the phenomena of intoxication, but that it occurs suddenly and unexpectedly, and in consequence of an unknown predisposition of the economy.

Amylene is therefore but another anæsthetic agent, to be placed side by side with ether and chloroform. Its action is prompt and of short duration, while its effects rapidly disappear. It is to be preferred in very short operations, when

we wish simply to prevent or moderate the pain. Moreover, its not exciting irritation of the air passages renders it a valuable agent when pulmonary lesions exist. It does not, too, give rise to vomiting or nausea, which are not infrequent after chloroform. This is important, especially in relation to children, enabling us to operate nearer their meal-time, and avoid the inconvenience of submitting them to long fasting, which they support very badly; nevertheless, vomiting does occur occasionally.

As the insensibility produced is of such short durability, and muscular contractility is only exceptionally influenced by it, amylene should not be employed for long and difficult operations, and especially those in which it is requisite to subdue the contractility of the muscles, as in dislocations, hernia, the diagnosis of abdominal tumours, etc. M. Tourdes has stated that muscular resolution may at last be obtained by a sufficient prolongation of the anæsthesia; but independently of the inconvenience that might result from the absorption of such large quantities of amylene, and the troublesome uncertainty the Surgeon is kept in respecting the return to consciousness of his patient, it is by no means proved that such resolution would ensue upon a multiplication of the doses. Moreover, the reporter's experiments would seem to show that such repetition, providing the dose be not rendered excessive, tends to destroy the activity of the agent; while when resolution was obtained it was only shortly before death.—*Bull. de Thérap.*, May, p. 443.

M. Velpeau, as a member of the Committee, observed that he was no great partisan of amylene, and does not think, as far as his own experience goes, that it is likely to displace chloroform. Against its employment are its detestable smell, alike annoying to operator and patient, the little constancy of its effects, and the necessity of employing an apparatus. As to chloroform, he believes that the amount of danger attending its use has been grossly exaggerated. During the ten years he has employed it in from 5 to 6000 cases, for operations at different ages and in both sexes, he has met with no accident whatever. No important accident has, indeed, occurred at any of the great Paris Hospitals. Moreover, how unjust, whenever a death occurs during or after an operation, to attribute it to chloroform! Employed with proper precautions, he does not regard it as a bit more dangerous than amylene, while it may be administered without any apparatus.

M. Giraldès, at a subsequent meeting of the Académie (*Gaz. Méd.* No. 21), gave a further account of his experience, having used amylene in the cases of seventy-nine children, varying from one to fourteen years of age, two drachms being in most cases the quantity employed. The time required for the production of the anæsthesia is usually about three minutes, but it varies much, both in different persons and in the same individual. No ill consequence has resulted, the anæsthesia taking place without reaction, or convulsions. In eight cases muscular rigidity was observed; and when this occurs the inhalations should be suspended awhile, and free respiration permitted. In six cases vomiting occurred. The anæsthesia lasted for a very short time, but it may continue for eight or ten minutes, and is easily kept up. Chloroform is a more powerful agent, but it is also a more dangerous one. It may throw feeble children into a state of cadaveric resolution; and the anæsthesia it induces is often so prolonged as to endanger life. On other occasions it induces spasmodic closure of the jaws, rigidity of the muscles of the neck and thorax, and all the symptoms of asphyxia, rendering artificial respiration necessary. It generally gives rise to vomiting, or other signs of irritation of the digestive organs. After the employment of amylene sensibility rapidly returns, and the children seem in nowise to suffer from it. It may be given soon after meals, and to enfeebled children, in whom chloroform would prove dangerous. It thus has, like chloroform, its special indications, and frequently presents indubitable advantages.

Dr. Kadtburger (*Wien Wochenschrift*, No. 19) relates the results of his experience of the employment of amylene in seventy-two cases of tooth-extraction, he applying it by means of a sponge to both mouth and nostrils. He states that the amylene he employs emits a smell of over-ripe pears, and is nowise irritating to the respiratory organs. From one to one and a half minute inhalation suffices for this purpose. The falling of the uplifted arm, as if wearied, is the signal for the discontinuance of the inhalation. No abnormal muscular movements or closure of the jaw were produced. The

patient readily opened the mouth upon being requested to do so; and during the extraction most persons retained the consciousness of the application of the instruments. The pain, when felt at all, was very slight, and never at all approaching to the torture attendant upon ordinary tooth-drawing.

EXCERPTA MINORA.

Warts on both Conjunctivæ.—Dr. D. Müller believes that among the various cases of congenital *verruca conjunctivæ* that have been recorded, in only three instances have they been found in both eyes. He has met with a fourth. The yellowish-white firm tumours were placed, as is usually the case, upon the lower limbus of the conjunctiva, opposite the external angle. On one eye it measured 3 lines. and on the other 2 lines in diameter, both rising to the height of about 1 line. They precisely resembled warts found elsewhere, and were covered with numerous bristle-like hairs.—*Archiv. für Ophthal.* Band ii. p. 159.

Arnica in Pertussis.—M. Gentil reports that during a recent epidemic of pertussis, after the failure of various means, the root of *arnica montana* rendered signal services. A decoction was made with a half to one drachm of the root, and taken during the day.—*Rév. Méd.*, May, p. 624.

Masking the Taste of Cod Liver Oil.—M. Leperdriel recommends the addition of 10 per cent. of common salt as the best means of masking the taste, not only of cod liver oil, but various other kinds of fish oil. The salt may not only conceal the taste of, but add to the digestibility of the oil. Essence of aniseed further masks the oil, but for most persons the salt suffices.—*Ibid.* p. 625.

Simple Sweating Bath.—Dr. Trilobet states that the most effectual means of obtaining a prompt and abundant transpiration is to place the patient in an empty bath, light a spirit lamp, and cover him with thick coverings. Sweating commences directly.—*Ibid.*

FOREIGN CORRESPONDENCE.

FRANCE.

[From our Paris Correspondent.]

PARIS, 8th June, 1857.

I cannot send you to-day any interesting record of the proceedings of our Medical Societies; these corporations meet all the year, but in the summer months their activity is considerably lessened, and sometimes they have but a very small number of orators and auditors. For want of these matters I will give your readers a short notice of some of the most interesting Medical books which have been published during the last two months.

Two volumes of 800 pages each have appeared—a considerable work, as you see—upon Prostitution in the City of Paris. (a) A third edition of the remarkable book of Parent-Duchatelet upon that subject was wanted; and no one has better information, and was more capable of affording it than Mr. Trébuchet, head of the Sanitary office, and Secretary of the Board of Health. Parent-Duchatelet, who died in Paris, 1836, had been the pupil of Hallé, a celebrated Physician of the beginning of this century. He neglected practice for the study of hygiene. In this science he soon became a master by his clever Reports and numerous researches. The first edition of his work upon Prostitution appeared in 1818; the following year a second edition was issued. Since that time numerous changes and great improvements have taken place. It was necessary to give an account of them, and to explain the actual state of that important moral and hygienic problem in Paris, and in the principal towns of France and Europe. The leading idea of our Sanitary police in these matters is, that Prostitution is an evil which cannot be eradicated, and which must be subjected to rules and even meliorated. Such were the conclusions of that virtuous man, Parent-Duchatelet, at the end of his long and scrupulous inquiries—MM. Trébuchet and Poiret-Duval have arrived to the same opinions by their researches upon Prostitution in Paris during the last twenty years. To give an idea of the value of such

(a) De la Prostitution dans la Ville de Paris, par Parent-Duchatelet. Troisième édition complétée par MM. Trébuchet et Poiret-Duval. B. Baillière.)

work it is not necessary to make the analysis of all its contents. Such a number of facts and of statistical data cannot easily be summed up here; but the titles of some of the questions treated in the book will, I think, be interesting to some readers. Such are the chapters upon the manners and customs of the Prostitutes, their religious sentiments, their character, etc.; the physiological considerations respecting them; the influence of Prostitution upon the health; the Sanitary care of the Prostitutes: the history of our Hospitals for syphilitic diseases; the amount of Prostitution in the towns of Bordeaux, Brest, Lyons, Marseilles, Nantes, Strasbourg, Algiers, in England and in Scotland, in Berlin, Berne, Brussels, Christiania, Copenhagen, Hamburg, Rome, etc. The publishers of this work, MM. Baillière, deserve peculiar notice for the care that they have taken to give to Medical literature a book so completely studied and finished. It will do honour to them, and it adds already a new renown to the principal editor, Trébuchet, so well known by his complete practical knowledge of the Sanitary regulations of this country, and by his learned researches on many questions of Sanitary science.

Dr. Bertillon is the author of a book full of wit and knowledge, against the detractors of Vaccination (a); an octavo volume of more than 200 pages. You have heard, perhaps, in England of some Physicians of this country who have endeavoured to prove that vaccination, far from being a benefit to mankind, has been the cause of great evil in modern nations. Among these Medical men was a mathematician, M. Carnot, one of the most obstinate adversaries of the discovery of Jenner. He has published and sent to the scientific Societies, in the last five years, several essays, full of figures and calculations upon the debate. It was well known that M. Carnot's views and demonstrations had no true scientific value; but among such an array of mathematical and statistical data it was not an easy task to find the mistakes and malcomputations of the system. Dr. Bertillon, who was one of the members of the statistical international congress of Paris, has undertaken that laborious task. One may say of his work, that it sometimes requires more skill and steadiness to struggle with a contested opinion, than to establish a truth. The author has displayed a thorough knowledge of the statistical method, and of the different works published since the last century upon the probabilities of human life. It is only to be regretted that he was not acquainted with the valuable researches of Dr. Farr, of your Registrar-General's office. We may also reproach Dr. Bertillon with indulging sometimes in some expressions which are not truly scientific in style. For example:—"We must now besiege the Sebastopol of the adversaries of vaccine." But it must be acknowledged that the young author has accomplished an important task in proving, by the most positive facts, that all the arguments of the adversaries of vaccine are erected upon false or incomplete and imperfect data.

GENERAL CORRESPONDENCE.

CONFIDENTIAL REPORTS IN THE ARMY MEDICAL DEPARTMENT.

[To the Editor of the Medical Times and Gazette.]

SIR,—The appointment of a Royal Commission to inquire into the condition of the Medical Department of the Army, nearly twelve months after the publication of the Report of the Select Committee of the House of Commons, would imply the belief that much important evidence remains to be collected and considered in regard to the management of our larger Military Hospitals, before changes of a sufficiently comprehensive nature can be safely introduced.

The lamentable experience of the late war has shown that it is almost impossible to overrate the importance of the subjects comprised under the present inquiry; and, coming as it does after many other unsuccessful inquiries, it is to be hoped that in the present instance the Royal Commissioners will avail themselves of all accessible facts that bear upon the administration of the department, as exemplified in the working of our late Military Hospitals in the East.

On referring to the "Minutes of Evidence," taken before the late Select Committee of the House of Commons, it will be seen that throughout that inquiry no evidence was obtained of the conditions and management of our larger Hospitals during the war; and, although it transpired during the sittings of the Committee that eighteen Civil Surgeons had been on duty in the Hospitals at Scutari and Kululee in co-operation with Army Surgeons, yet not one of those gentlemen was called upon for information during the consideration of subjects of admitted importance and difficulty. Considering that the Civil Surgeons were actively engaged at Scutari for upwards of twelve months, that they were men of from twelve to twenty years' standing in the Profession; that many of them had been previously attached to some of our best regulated London Hospitals; and, moreover, were wholly independent of the Army, and beyond the influence of questions of promotion or rewards, it seems not unreasonable to suppose that the examination of one or more of them might have elicited valuable information on some of the chief questions then under consideration.

Nearly eleven months have since elapsed without the anticipated results, and as the whole subject is now referred to a Royal Commission for more extended inquiry, and with more definite subjects of investigation, I consider that every one who can contribute facts towards the great objects of securing a higher degree of health among our troops, and providing the most ready and efficient treatment under disease and injury in time of war, should at once speak out. I therefore take the liberty of addressing you on some points of great public interest, relating to the general organization and administration of the department. Having lived day and night in the Great Barrack Hospital at Scutari for nearly twelve months, I need scarcely say that I had considerable opportunities of observing the manner in which the present system was there carried out, and, also, of forming an opinion of some of the principal causes which rendered the department less efficient than it might have been. In making the following observations, however, I shall avoid as much as possible entering into retrospective controversies, my sole object being to endeavour to turn the subject to its present practical use.

There is, probably, no cause which exerts a more direct influence upon the conduct and efficiency of army Medical officers than the mode hitherto adopted by the heads of the department for obtaining information of the general merits and professional qualifications of officers for the various duties which devolve upon them, and especially for their fitness for promotion over the heads of others on the ground of supposed higher qualifications. It was stated in the late evidence of the Director-General, that the promotion of Assistant-Surgeons to full Surgeons was invariably ruled by seniority, excepting only in cases of acknowledged incompetence or misconduct; but that promotion through all the other ranks was determined by selections according to the recommendation of principal Medical officers of large Hospitals and stations. It is well known that these recommendations are effected through the medium of confidential reports, and that they are essentially secret: that is to say, the report of any Medical officer by the principal of an Hospital or station, and which may, possibly, be of a nature to operate as a bar to promotion, as a general rule, is not communicated to him; the exception being that if, after long neglect and suspected misrepresentations, he were to complain to the Director-General, and to press very hard for some explanation, he might hear the exact ground of disapprobation recorded against him, but only when too late to refute any unfair statements, or to obtain justice.

Although the employment of confidential reports occupied most prominently the attention of the late Select Committee, the full tendencies of the practice, especially upon the younger officers of the service, were not, I think, made so clear as they would have been, if the experiences of the late war had been more fully disclosed. I will therefore endeavour to illustrate the ordinary effects of the system, by narrating briefly some of the most prominent occurrences which took place at the Barrack Hospital under my own observation, and for the accuracy of which I hold myself responsible.

In consequence of the Senior Staff Surgeon, being almost exclusively engaged in routine business connected with returns, reports, requisitions, &c., in almost endless variety, the actual treatment of disease, and the management of the sick, devolved chiefly upon the junior officers, viz., Assistant-

(a) Conclusions Statistiques contre les Détracteurs de la Vaccine, par le Dr. Bertillon. Paris: V. Masson.

Surgeons, acting Assistant-Surgeons, and Hospital Dressers. The conduct and professional abilities of these younger officers could rarely come under the personal cognizance of the principal Medical officer, and could only be represented to him by one or other of the 1st class Staff-Surgeons. This indirect, and somewhat irresponsible mode, by which the conduct and merits of the junior officers were ultimately estimated, was not without its baneful influence both upon the Medical officers themselves and upon the sick soldiers committed to their care, as will appear from the following illustrations:—

On my arrival at Scutari at the end of March, 1855, I was appointed to the entire charge of seventy beds in H Corridor, 4th Division, nearly all of which were then full. The main treatment of those patients had previously rested with an Acting Assistant-Surgeon and an Hospital Dresser, who continued on duty as my assistants. A great number of the cases consisted of men suffering from bed-sores after fevers, and from frost-bites. The only beds throughout the wards were straw mattresses on plank-bottom bedsteads. I need scarcely here point out that in such cases all treatment must be fruitless that does not comprise essentially the means of relieving the painful parts from pressure. In the basement floor of F Corridor there were at the same time hundreds of iron bedsteads, with sacking and spring bottoms, piled up nearly to the ceiling, and literally rusting for want of use. There was also in the same place an immense number of horsehair mattresses and other bedding resting on the brick floor, and spoiling from damp. Here, therefore, on one side were men in the highest need of the articles to which I have referred, and on the other the articles themselves were undergoing daily deterioration for want of use; nevertheless the men had been permitted for weeks to lie and suffer, and many of them to die, from sheer want of part of the abundance by which they were surrounded. The Assistant-Surgeon and Dresser in attendance were of course as well aware as myself of the importance of clean and suitable bedding in such cases; but, in answer to my question why they had not obtained them earlier, they both told me that more than one requisition had been sent, but without success; and their further remarks implied the folly of exposing themselves to the risk of "black marks" by importunate and misplaced zeal; so "the way not to do it" had been silently allowed to take effect. From that date the entire charge of the above-mentioned wards rested upon myself. One of the patients to whom I have referred as suffering from bed-sores was in a most exhausted condition, and his death was hourly expected. I therefore sent an orderly with a requisition to the Purveyor's office (dated April 5, 1855,) for an iron bedstead with a spring bottom and a horsehair mattress. That requisition was totally neglected. On my next visit I sent a second, expressing thereon my opinion that the man for whom I had ordered it was in imminent danger, and that the articles were urgently required. A copy of the same I sent to the principal Medical officer, the Inspector-General of Hospitals at that station. Within half-an-hour I was sent for by him to say that on my urgent representation he had ordered the things to be supplied, but cautioning me "not to make difficulties," adding, at the same time, that he knew the man's case, and that he would not recover, whatever bed he might have to lie upon. The change of bedding was not, however, all the same to the poor man. His improvement from that time was most marked. His recovery, which on April 5 had been pronounced hopeless, on May 5 was nearly complete; and before the end of that month he was pronounced convalescent. Before a week had elapsed all the straw beds and plank bottom bedsteads in my wards were replaced with hair mattresses on iron frames, and spring or sacking bottoms; and within a month the latter were in general use throughout the hospital. The want of necessaries was not, however, confined to bed and bedding. Not a single man in my wards was provided with a woollen or flannel undershirt. The weather was then generally damp and cold, especially at night. Many of the windows were broken, and in some places the frames entirely gone. Several patients were suffering at the same time from rheumatism, dysentery, fever, and its results, in all of which warm clothing next the skin, under the exposure to which I have referred, was of first importance. These articles, though previously refused, were supplied to my wards at my urgent representation within a week of my taking charge, to the unspeakable comfort and benefit of the men.

So also, in regard to easy chairs, which by the provident for-

sight of the Director-General had been sent out from England for the express accommodation of men who had lost the use of their lower limbs by wounds or frost-bite. These chairs, till the time I speak of, had been carefully preserved in the packages in which they had arrived, and most jealously had they been guarded from the fulfilment of the purposes for which they were designed until they were fairly pressed into service by the Civil Surgeons.

Even in regard to medicines, etc. the same awe in which the Junior Medical Officers stood of those in the higher ranks of the departments, and the same reluctance to represent their commonest wants, resulted in a most defective condition of the Dispensaries. As late as the 20th May, 1855, long after the Hospital had been in full operation, and six months after the battle of Inkermann, some of the simplest medicinal preparations were not to be obtained from the Dispensaries, although the materials existed in great abundance in the apothecary's stores in the same building. In confirmation of this statement I copy out the latter part of a letter which I addressed to the Inspector-General on that subject:—

"To DR. —, INSPECTOR-GENERAL OF HOSPITALS.

"Barrack Hospital, Scutari, 10 F. Corridor,
May 20, 1855.

SIR,— I may, perhaps, be allowed to take this opportunity of calling your attention to the general inefficiency of the Dispensary department of this Hospital, as far as it has come under my own observation. Although it has been for many months in full operation, and, although there seems to be an abundance of medicines in their crude state, I have never yet been able to obtain such a simple and necessary medicine as the common black draught. No infusions of any kind can be obtained, even of such acknowledged efficacy as senna, rhubarb, gentian; nor such equally useful preparations as decoction of bark and compound decoction of aloes. I have several times applied to the dispensers for these medicines, but I have been told that their duty is to dispense medicines, and not to prepare them, for which latter, they say, they have no time. How far this is a sufficient reason may be judged from the fact that they are off duty daily from 1 to 8 p.m.—to say nothing of the lightness of their duty from 9 a.m. to 1 p.m. I made a special remonstrance on the subject to the chief apothecary about ten days ago, but up to this time without effect. I therefore feel it my duty to report the matter to yourself, because I am daily fettered in the discharge of my duties by what appears to me the great and unnecessary limitation of useful preparations of the Pharmacopœia. Perhaps I may be pardoned for adding the suggestion that one or two of the ample staff of dispensers should be occupied for two or three hours in the morning in making a few of the most useful preparations for distribution among the four dispensaries of this Hospital.—I am, &c.

"HENRY MORTIMER ROWDON."

The result of that letter was, that within a week a proper laboratory was fitted up for making decoctions, infusions, etc.; and from that time forward those medicines were always kept ready for use.

In making these statements it is but justice to add, that upon all those occasions, by going in person to the Inspector General, or by writing to him officially, representing the requirements of the patients, and the conditions of the wards, my applications were invariably attended to; but the manifest unwillingness to receive representations on these points, and the impatience with which they were listened to, generally coupled with remarks about "creating difficulties, making trouble, etc.," convinced me that if I had been fairly in the service, my chance of promotion would have been *nil*, and the prospect of my being sent off incontinently to some dismal station for life tolerably certain. In assuming that the Medical officers in the service were unwilling to incur similar risks of disapproval, in performing a plain and palpable duty, I am borne out by the fact that otherwise such a state of things as I have described, previously to the arrival of the civil Surgeons, could not have existed. The system must, indeed, be in need of change that could permit such necessities to exist in the midst of such profusion. It was stated by Sir John Hall, in a letter inserted in the *Times* in March last, that all the required improvements had been effected in the Military Hospitals before the civilians reached them. That may have been true as regards the Hospitals in the Crimea; but the remark certainly does not apply to those at Scutari.

It will be seen that the chief objections to the present

system of confidential reports are not based so much upon the probability of inflicting occasional injustice in regard to promotion, as upon their prejudicial effect upon Medical officers in the daily routine of duty. In the report of the late Select Committee it was recommended "that the system of confidential reports should be placed upon the same footing with those relating to combatant officers."

The practice in regard to combatant officers is that when an unfavourable report is made of any officer to head-quarters, that report is brought to the officer's notice through his commanding officer; and, with army officers generally, confidential reports are considered useful only so far as supplying information of eligibility for promotion, but they cease to be confidential when of an unfavourable character. In regard to Medical officers, it would probably be a great benefit to the service if the rule existed that when a principal Medical officer was dissatisfied with the conduct of a Surgeon or the state of his wards, he should be required to give notice to the Surgeon of his intention to remark on his neglect of duty.

It would also undoubtedly convey throughout the service the belief of justice and impartiality in regard to recommendations for promotion if similar means were adopted for recording the approbation of the principal Medical officers on grounds of professional ability and zeal.

I propose in a future letter to enter upon some other questions bearing very closely upon the efficiency of the Medical department. In doing so, I repeat that my only object is to turn the subject to its present use. It must not be forgotten, that in the course of the late war many defects were made known that probably could not have been foreseen, but which were then revealed in their results. To conceal their occurrence might therefore prevent the adoption of precautions against their repetition, and thus deprive the service of the advantages to be derived from experience purchased in the late war, unhappily at a fearful price.

I am, &c. HENRY MORTIMER ROWDON.

29, Nottingham-place, June 9, 1857.

REASONS WHY MR. HEADLAM'S BILL WILL NEVER PASS THE HOUSE OF COMMONS.

[To the Editor of the Medical Times and Gazette.]

SIR,—About twenty-five years ago, being in London, I was intrusted with a commission by a friend in the country, who wished to bring up her only son to the Medical Profession. It was to make inquiry whether there was any truth in the statements then current that Parliament would certainly come to a conclusion as to Medical Reform in that session. A short time ago I stumbled upon a memorandum of what I did at that time, and I find that I made careful inquiry of some influential men in the Medical Reform world, and wrote back that it was really expected in well-informed quarters that the question so long agitated would at last be settled. The mother (a widow) delayed taking the necessary steps to educate her son. Let loose on the world, he enlisted into one of our hussar regiments (a magnificent soldier he made,) and his bores have been for many years bleaching somewhere on the plains of the Indies.

On looking back, I find that year after year we have had the same story that witnessed this poor widow's confident expectations at the beginning of the session; at the close utter failure. How much more pecuniary loss the Medical Reform agitation has cost the Profession it is difficult to say—not less, perhaps, than £1000 per annum for the last thirty years. This is, however, its least infliction; the loss of time and labour, the unpleasant discussions, the uncertainties, the weariness of hope deferred, are much greater; so that the question has become an unbearable nuisance.

Partly in consequence of this no Bill has had so much support within the Profession, although not of the Profession, as that of Mr. Headlam. Its great characteristic is that it has united the Medical Corporations in a common action. Yet with this apparently powerful support it has, in the opinion of many, no chance whatever of passing the House of Commons either now or at any future time. The reasons why are certainly worthy investigation; I will, therefore, mention them.

Let the would-be Medical legislator first examine the composition of the House of Commons, and having well considered that it is a lay assembly, with few professional sympathies

with a considerable amount of professional antipathies, and with principles and traditions of legislation by which its course as to any particular measure is guided, let him see whether his proposed measure is in accordance with these principles or traditions, or at least that it arouses none of the antipathies, and secures the sympathies of the House. I think that we may fairly assume that the principles of social freedom and of free trade have not ceased to influence it, and that the power of irresponsible taxation will not now-a-days be deliberately conceded to corporate bodies. If, then, a Medical Bill both ignores those principles and confers such powers, is it reasonable to hope that it will have the approval of the House of Commons? Such a Bill is Mr. Headlam's.

That Bill concerns two classes of practitioners,—the existing and the future.

1. It requires all existing practitioners to be "registered," after passing of the Bill, under penalties of deprivation of civil rights; for, by clause 31, no person shall be entitled to recover any charge in any court of law for any medical or surgical advice, attendance, or for the performance of any operation, or for any medicine prescribed, administered, or supplied by him to his own patients, unless he shall prove upon the trial that he is registered under this act. If an existing practitioner who from any cause neglects to register, "take, or use, any name, title, admission, or description, implying that he is registered," (that is, any of the titles which he can now and does legally use,) he may be summarily convicted before any two justices of the peace, on the oath of one witness, and ordered to pay a sum not exceeding twenty pounds, nor less than five pounds. If not able or willing to pay, the said justices may commit the offender to a gaol or house of correction for a term of six calendar months. A quack doctor may call himself what he is—"herbalist," "bone-setter," and the like,—without fear of penalty, and practise freely without registration; but a qualified practitioner may not, if a Physician, venture to designate himself "Physician," or a Surgeon "Surgeon," without previous registration. He may be fined, and in default of payment imprisoned for six months in a house of correction.

2. Every practitioner failing to register, is disqualified for any office or employment.

3. Every existing practitioner being registered cannot remove from that part of the United Kingdom in which he is registered to another, in order to practise, without being registered afresh; but before he can be so registered he must have first become a member or Licentiate of the corresponding college or faculty.

4. When duly registered all practitioners must look sharply about them; for clause 18 provides that a registrar may write a letter to any registered "person," addressed to him according to his address on the register, to inquire whether he has ceased to practise, or has changed his residence; and if no answer shall be returned to such letter within the period of one month from such sending of the letter, the name of the registered person may be erased from the register. Thus, a practitioner residing where he always has resided, not getting the letter in time, may, from no fault of his own, suddenly find himself liable to all the pains, penalties, and disqualifications of the act. To understand better the trouble and expense to which a practitioner may thus be put, it must be borne in mind that, by clause 17, a printed register is to be published annually, which is to be evidence in all courts and before all justices; and the absence of the name of any person from the printed copy is evidence (it is specially provided) that the person is not registered. So that even a mistake of the registrar, or of an office-clerk, as well as of a letter-carrier or servant, or of the printer, may utterly disqualify a practitioner, while the Bill expressly throws the onus of proving the mistake upon the sufferer. On the other hand, the registrar can only be punished when "wilful" falsification can be proved, and even for so serious an offence the punishment is no greater than that provided for the hapless practitioner, who not being registered has not the means to pay the penalty and costs inflicted by any two justices.

Conceive it proposed that any other trade or profession should be subjected to these harassing restrictions and penalties—a rector, or a dean, or a barrister made the victim of penalties on the oath of one witness before any two justices, in common with rogues and vagabonds, for not having his name and address properly inserted in the Directory. I am not far wrong in supposing that they would look upon such a

proposition as simply an unintelligible insult. But "the Medical men"—they were ever a patient race!

As to Physicians, those who now have the legal right to practise as such, have also secured to them by special enactment the right to practise surgery (32 Henry VIII. c. 40); they are, also, exempt from the operation of the Apothecaries' Act of 1815. By this Bill they are disfranchised, and all those who in the exercise of their unquestioned legal privileges continue to practise Surgery, or to dispense their own medicines, are denied the title, and cannot register as Physician. Thus, to dispense medicines is, according to the Bill, to exercise the art and mystery of an Apothecary, as if an English Apothecary were a mere trader, and not a member of a liberal profession. If a Physician, when registered under the act, remove from one part of the United Kingdom to another, and he be not already a Licentiate or Fellow of a College of Physicians, then, before he can register as a Physician in that part of the United Kingdom to which he removes, he must be examined and enrolled by and in the College of that part. If he fail to do this, he will be struck off the register altogether, and "shall not be restored until he shall have been so enrolled," and paid penalties for each calendar month of not more than £5. By clause 30, it is expressly enacted that he shall not be entitled to recover reasonable charges, etc. in a court of law; common justice is thus denied him by positive legislation, although it was never known that a Physician had brought an action, as such, for fees. The would-be Practitioner must go through the following stages:—

1. He must have a degree in arts, or have passed examinations equivalent thereto.

2. He must undergo three separate examinations, by a joint Board, in Medicine, Surgery, and Midwifery, and their collateral sciences.

3. Having successfully passed these three examinations, is he entitled to be registered?—No. He is only qualified to undergo another examination by the respective Colleges of Surgeons.

4. But, having successfully passed this second examination, he may surely now be registered? Not yet; he must first be "enrolled" a member of the College which has examined him, and of none other, and pay the fees.

5. Having done all this, he may now be registered, and be subject to all the restrictions first mentioned.

But let us take a possible case. From various considerations, of a financial or domestic character, the Medical school the student has selected for him is in his native town, or where relatives reside, as, *e. g.* Aberdeen. Having completed his studies there, and having passed his three examinations before the conjoint Board for Scotland, sitting at Edinburgh; and having now passed his examination at the Edinburgh College of Surgeons, and been enrolled, and so qualified to be registered, his friends now look about for an opening for him, and find that he can settle at Belfast with fair prospects of success. Before he can do this, however, he must proceed to Dublin, and be enrolled a member of the Irish College of Surgeons; otherwise he cannot obtain the indispensable preliminary to practise, namely, registration. Further; he finds that he can remove for the summer months to a watering-place in England (say Harrogate), with Professional advantage, as well as with personal benefit; but he must now be enrolled in the English College of Surgeons, and pay his fees, and be registered; for, by clause 23, "every Physician and Surgeon who shall not, within three months after such removal, cause himself to be enrolled shall be struck off the register" (that is, forfeit all legal rights), "and shall not be restored until he shall have been so enrolled, and shall have paid to the Treasurer of the Branch Council such penalty as the Branch Council shall think fit, not exceeding £5 for each calendar month during which he shall have been so in default." It follows, therefore, that a Practitioner cannot "remove" at pleasure from one part of the United Kingdom to another for longer than three months at once, and at the same time have the privilege of calling himself "Surgeon," and accepting fees, unless he be actually enrolled in the three Colleges, and be on the three registers of each division.

Whether even this could be done under the Bill as it stands is doubtful, for when he removes, he is, or ought to be struck off the register of that part of the United Kingdom from whence he removes. I think I have fairly stated the possible working of the Bill in so far as I have gone. Well, then, what would an

intelligent member of the House of Commons say to all this? Obviously, at first glance, that it is virtually the Continental passport system, fixed upon the Medical Profession for some great and comprehensive purpose; and he would naturally inquire why they should be subjected to all these complicated processes, and pains, and penalties, and examinations, and enrolments, and registrations, and fees; why, *e. g.* he would ask, could they not go without hindrance from one part of the kingdom to another, and practise their art freely? Oh! say the promoters of the Bill, the clergy and the bar cannot do that, and why should the Medical Profession? But then, says the inquiring member, why assimilate the Medical Profession to the church or the bar? They are bound to no creed or sect—they practise in no special courts. They belong to all mankind, are free men in every sense, and should be left free to use their knowledge and skill where and how they will, so long as they do it honestly. True, says another advocate of the measure, but the Bill really aims to put down quackery, and thereby protect the public and benefit the Profession, which gladly surrenders its freedom, as you see, for so great and good an object.

"I agree with you as to the importance of the object you aim at," says the legislator; "but in this Bill there are no pains and penalties for ignorant quacks; these are only for the duly qualified Practitioners. You tell me the quack cannot recover his fees under the Bill. What of that? He is a business-man, and always takes his fee before he gives his advice. And if he cannot be legally appointed surgeon to a Union, or hospital, or regiment, or ship, may I ask, Has the ignorant, mischievous quack ever applied for those offices? You say he will incur penalties if he does anything to imply that he is registered under the Act; then he will glory in his superior freedom, and have a large brass plate on his door, deeply lettered, 'John Snooks, Herbal Doctor and Water-Caster—not registered.'"

By what logic do you reach the conclusion, that when you have fined, say Sir B. C. Brodie, before two city aldermen, for not being registered (if he chance to be in that predicament), and sent him to prison for obstinately refusing to pay, you have hit John Snooks a heavy blow, and given his practice great discouragement? Will he not, with some show of reason, argue that he is the safer man of the two, or the law would have looked as sharply after him as after Sir Benjamin? "Upon the whole," says the M.P., rather quizzically, having studied political economy as a science, "you may trust the public to protect itself." The inquirer, passing from the political questions raised in the Bill, comes to the educational. He is told it is intended to raise the tone and status of the Profession, and to advance the science of medicine. "I see," he says, "you have a series of examinations. May I ask why, when the candidate has passed three such in the departments of Medicine, Surgery, and Midwifery at a conjoint Board, he cannot be registered at once, and be entitled to practise? Can they, or can they not, be made sufficient to ascertain the fitness of the candidate? "Undoubtedly they can," the advocate replies (himself an examiner *in esse* or *in posse*, and with faith in "examinations"); but if we were to take the power of examination wholly from the Colleges they would lose their incomes, for those are derived from the fees for examination. "But then," says the M.P., "what about the fees paid for 'enrolment' as a 'member'?" "Oh," replies the advocate, "those are also for the funds of the College, to support their museums and libraries, and to advance Medical science." Thus, then, the legislator sees that it is a scheme for taxing all Professional admissions and removals, to secure funds for the Medical corporations; and thinks it needlessly complex.

But next the question arises, whether a taxation of the Profession is necessary for such purposes? and he asks, "Did John Hunter, who founded that noble museum which bears his name, or his brother William, a like-minded worker, seek to tax the Profession for his purposes? Was it the hope of the fellowship of the College of Physicians (which he refused on the terms it was offered to him) that urged Jenner, the country Surgeon, to his researches? Has chemical science, in any of its departments, needed for its advancement Colleges, and a tax on all who pursued it? Has the Royal Society—the representative of all science—asked for a Bill to compel all cultivators of science to enter it; to tax its Fellows when they removed from one part of the United Kingdom to another—to fix a standard of education for them—and to

force them to cram for "examinations" unnecessarily multiplied? Would science be the better for such measures? Emphatically, no! Then why Medical science? Nay, let me ask, as a question of fact, have the Medical "Corporations" really done as much for Medical science as the Medical "Societies?" This is a practical problem worthy careful solution.

Upon the whole, the legislator would add (feeling liberally disposed), if you can spend money usefully on Medical science, show us how, and apply for a grant at once out of the Consolidated Fund. We cannot grant you powers of taxation hidden under an impracticable passport system. No good could come of that to the public, to the Profession, to yourselves, to Medical science.

Perhaps the M.P. will not say all this, he will only think it; but he will never advance one step beyond taking the matter into "consideration." If a member of government, he will listen blandly and resignedly to an "imposing" deputation, express his gratification at hearing that "at last the Profession is unanimous," etc.; but a member of government would not for the sake of his credit endorse such a Bill. He is a professional man in his way, and has a reputation for success in his profession to win and to lose. How, then, could he support a measure that ignores the established principles of sound political economy and of civil freedom; that taxes for indefinite objects in the most cumbrous and harassing manner, thereby stimulating to evasion; and that would manifestly fail in the removal of any of the evils which it is proposed to remedy? Curiously enough, the penal clauses of the Bill are exactly on the model of the 14th and 15th Henry VIII. The College of Physicians of London have at this moment full powers to fine, and commit to Newgate in default, persons practising physie in the metropolis without their licence; nay, the fine is of the same amount in the two measures, £5 per month. The tone and spirit, too, of the new measure is identical with that of the old. How is this? Do we live in the nineteenth century? or, is it that we *have* lived, and are gone back to the sixteenth? If so, history is indeed an old almanac, and we have learnt nothing from the experience of those who have gone before us.

I am, &c. T. LAYCOCK.

Rutland-street, Edinburgh, June 16, 1857.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, MAY 5.

Mr. WILLIAM ADAMS in the Chair.

Mr. CURLING exhibited a specimen of

STRICTURE OF THE RECTUM.

A woman, aged 38, had died after a long illness, the symptoms of which were referable to a close stricture of the rectum, about three inches from the orifice. There had long been profuse purulent discharge from an ulcerated surface of considerable extent. Death occurred at length from peritonitis. The stricture did not appear at the autopsy to be cancerous. There was an abscess behind the rectum, and two ulcerated openings above the stricture communicated with it.

Dr. OGLE exhibited, on behalf of Mr. Hussey, of Cambridge, a specimen of

ANCHYLOSIS OF THE CERVICAL VERTEBRÆ.

The specimen showed anchylosis of the odontoid process of the axis with the occipital bone, and perfect fusion of several of the vertebræ immediately below the former. The alotaxoid articulations had escaped. The cervical canal had been much narrowed, and there were large masses of apparently recently formed bone around the processes. In some places out-growths of bone for the attachment of muscles had taken place, and the normal conditions of the bones had been totally changed. There was no history of abscess, nor was it known at what age the disease had commenced. The patient was a man, aged 70, who had been insane for some years. His knee and hips had been firmly contracted, so that he always moved about in the sitting posture, twisted up like a tailor.

Dr. Ogle thought the original disease must be believed to have been scrofulous caries, and that the contraction of the limbs had been due to the compression of the cervical part of the spinal cord.

The PRESIDENT (Mr. Adams) doubted much whether the contracted condition in which the limbs had been stated to have been had been the result of the diseased vertebræ. He was inclined to think it more probable that it had been dependent upon infantile paralysis, which was by far the most common cause of such condition.

Dr. OGLE reminded Mr. Adams that it was quite evident from the specimen that the cord must have been pressed upon.

Mr. WOOD asked whether there was any history of spinal caries, and remarked that the condition to him appeared more likely to have been a congenital one. In three other somewhat similar ones, which he believed to have been of congenital origin, the same peculiarity had existed which was present in this, that the alto-axoid joint had escaped, although those above and below it were perfectly fused together. He thought it not improbable that the recent deposits which existed were of gouty origin.

Dr. OGLE regretted that not having seen the case himself he could not speak so positively as to some points of its history as was desirable. He would obtain further facts before the report was published.

Mr. HUTCHINSON showed specimens from a case of

SYPHILITIC NECROSIS OF THE FEMUR.

When syphilis attacked the bones it usually caused only the death of superficial portions, resulting in exfoliations. The present case, however, afforded an example of a much more rare occurrence, and one which had been but little adverted to by authors, namely, the death of the whole shaft of a long bone. The patient was a man, aged 23, under care in the Metropolitan Free Hospital. Eighteen months before admission he began to complain of severe pain in the left thigh, and was confined to bed for six months in an Hospital on account of it. At length abscesses formed, and broke in several places, leaving fistulæ. On admission the whole femur, from a little below the trochanter to the knee, was enormously thickened; indeed, the thigh had nearly twice the girth of the opposite one. In operating, a free incision was made along the outer side, and a trephine with a large crown applied in two places, the intervening bridge of bone being removed by the saw. The substitute shell was very complete, and had a thickness of nearly an inch, being also very dense and firm. The sequestrum was easily removed, as it broke up into fragments when twisted forcibly. In small fragments what appeared to be almost the whole length of the shaft of the bone was taken away, leaving a large cavity lined by soft granulations. The evidence that the necrosis had really been syphilitic was that the man had a node on the tibia of the same leg, which was liable to much nocturnal pain, and that he had had primary disease about three years ago. Mr. Hutchinson stated that he had seen several well-marked examples of syphilitic necrosis of the shafts of long bones, and had observed, as a distinguishing feature in their course, that the inflammation causing the necrosis was always chronic and slow in its progress, differing most markedly from the acute periostitis which usually causes that result.

Mr. HUTCHINSON showed a specimen of

RECURRENT FIBROID TUMOUR OF THE UTERUS.

The patient, a woman aged 42, had first come under his notice about two years ago. She had then for one year suffered from profuse bleedings, and on vaginal examination a tumour in the posterior wall of the uterus was diagnosed. She was a single woman, and was apparently in good health. After this single consultation she returned to her home in Lincolnshire, and was not again seen for about a year. In July, 1856, she was again sent to Mr. Hutchinson by his friend, Dr. Caumack, of Spalding. She was now exceedingly ill, being reduced so much by hæmorrhages that she was scarcely able to leave her bed, and on one occasion had remained so long in syncope that she was believed to be dead. On examination the uterus was found to be enlarged to the size of an infant's head, and to project in the right side of the abdomen, so as to be distinctly visible. Occupying the vagina was a lobulated polypoidal mass the size of three fists, and connected with the intra-uterine tumour by a thick peduncle. There was no ulceration of any part of the uterus

or vagina. Considering the rapidity of the growth, and the degree of fixity which the enlarged uterus had obtained, Mr. Hutchinson was much inclined to fear that the disease was malignant; but it was determined, nevertheless, to attempt its removal. This was done with the assistance of his friend Mr. Jackson, on July 28. The tumour proved too soft to permit of enucleation, and some large fragments having been got away, and the whole a good deal broken, the attempt was desisted from. For about a fortnight she remained very ill, and during this time many fragments of the tumour in a sloughy state came away. She slowly recovered, and six weeks afterwards a most careful examination failed to detect any remains of the growth, the uterus having again resumed its natural size, and the vagina being quite free. For about three months she enjoyed good health, and had no hæmorrhage. At the end of that time, however, a severe attack of flooding again occurred, and on examination it was found that the uterus was again enlarged to its former size, and that a large growth was on the point of being expelled into the vagina. The os uteri being well dilated, it was determined to again attempt enucleation, without waiting for it to descend. This was done in the end of December, Dr. Connor and Mr. Moore being present. The patient being under the full influence of chloroform, the hand was introduced into the cavity of the uterus, and an attempt made to scoop out the growth. A large quantity of fragments were removed, and the tumour thoroughly broken up. As on the former occasion, many portions in a sloughy state came away afterwards, and the uterus in the course of a month was not larger than natural. She again became able to get about, and enjoyed fair health for several months. A third reproduction of the growth subsequently occurred, and it attained such dimensions that the vaginal tumour was partially extended at the vulva. A ligature was now applied to the growth near the os uteri, and the lower portion was safely removed; it was not, however, deemed wise to meddle further with that in the uterus itself. Death followed a fortnight after the last operation. At the autopsy a large, whitish soft-textured growth was found to occupy the uterus, springing from the greater part of its fundus, and infiltrating its walls at this part. The growth had no attachments to the cervix, or indeed to any large part of the interior of the uterus. A careful examination of the body was made, and no disease of the glands, or of any other organ could be found. The corpse was fat, but exsanguined. Mr. Hutchinson was inclined to consider the tumour to be of the recurrent fibroid class. Its recurrence after two partial removals, and its very rapid growth showed that it partook of the characters of local malignancy, while the fact that although three years had elapsed since its origin, yet none of the viscera or the glands had become affected, showed that it was not a true cancer. Then again its microscopic features, which had been repeatedly and carefully examined after each operation, and by several independent observers, did not resemble those of cancer, but coincided closely with those of the recurrent fibroids. It probably stood half way between a cancer and an innocent fibroid tumour, being locally, but not constitutionally malignant.

Dr. PRIESTLEY stated that he had seen in the practice of Dr. Simpson of Edinburgh, a good deal of the enucleation of fibrous tumours of the uterus. They often became very soft after attempts at removal. From an examination of the specimen before the Society he felt inclined to suspect that it was a fibrous tumour altered in structure by the repeated operations.

The PRESIDENT suggested that as there was this difference of opinion, the specimen should be referred to a Committee.

Mr. HUTCHINSON said he could not feel the least doubt, either from the history of the case or the microscopic characters of the growth, as to its not being a fibrous tumour. He had every confidence in the opinion he had given, and should be glad to have the specimen submitted to a Committee for further report.

Dr. Bristow and Dr. Priestley were appointed to examine it, and report to the next meeting.

THE Ottoman steam frigate Geyvan Bahri, Captain Mustafa Bey, has arrived at Malta, on her return. During her stay in England (nearly one year) thirty-five of her crew died, chiefly from pulmonary complaints.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 9, 1857.

J. DIXON, Esq., in the chair.

A paper by WILLIAM AITKEN, M.D., communicated by Dr. Jenner, was read, on

THE EFFECTS OF THE BULGARIAN CAMPAIGN ON THE SUBSEQUENT HEALTH OF THE BRITISH TROOPS IN THE CRIMEA, AND ON THE INCREASED RATIO

IN THE LOSS OF STRENGTH DUE TO OTHER CAUSES.

The Author stated that the pernicious influence of the residence in Bulgaria had been hitherto entirely disregarded in estimating the sanitary condition of the troops during the first seven months' occupation of the Crimea, and that in all future pathological inquiries into the nature of the diseases from which our troops suffered, not only in the camp before Sebastopol but also at Scutari and other local hospitals, the influences noticed in this paper must occupy a prominent place. He observed, that the great comparative losses which seem to have been sustained by the drafts of new men also required investigation, but that unless we are put in possession of the ages of the recruits sent out, their exact numbers and periods of service, their admissions to hospital, deaths, and invaliding, as distinct from those of the other troops, the comparative losses they sustained cannot be accurately determined. In this paper the author classified the Crimean army into two parts, namely—

1st. Into the troops which served both in Bulgaria and in the Crimea, and which may be called the ex-Bulgarian part of the army.

2ndly. Into the troops which served in the Crimea only, and which may be simply termed the Crimean troops.

The statistical information upon which the statements contained in the paper are founded exists in the following records, namely—

1. Parliamentary paper No. 42 of the session 1857, giving the date of arrival and strength of each regiment.

2. Parliamentary paper No. 218 of session 1855, (pages 474 to 479), giving the same information regarding the drafts sent out.

3. It is known from various sources what were the respective regiments which served in Bulgaria (e. g. Parliamentary papers No. 218 and No. 42, and Russell's War.)

4. The Returns the author had been permitted to use, collected from the individual regiments, giving the monthly state of the strength of each regiment, and the diseases by which its losses were caused. From these tables the general abstract was made up, which is published by Sir Alexander Tulloch at page 171 of his volume, entitled "The Crimean Commission and the Chelsea Board."

The conclusions arrived at by Dr. Aitken are—1. That the inactive residence in the malarious district of Bulgaria, during a period of three months, exercised a persistent pernicious influence upon the subsequent health of the troops in the Crimea, which continued to make itself felt, more or less, throughout the campaign, and more especially during the first seven months. 2. That the loss to the strength of the army during the first seven months was greatly more in those regiments who had been in Bulgaria, than among those troops who had not lived there, but who served during the same period in the Crimea, and who went through precisely similar hardships during the campaign. 3. That the loss of strength to the whole army was greatly increased by the proportionably very large amount of loss sustained by the drafts sent out to recruit the regiments. 4. That the general mortality was increased among the ex-Bulgarian troops, and that the invaliding was nearly doubled among them. 5. That the persistent pernicious influence of the residence in Bulgaria showed itself in a remarkable manner, by the unfavourable results of the Surgery of the war among the ex-Bulgarian forces, compared with the results in the forces which served only in the Crimea; but that on the whole the results of the Surgery of the war were highly favourable compared with what is obtained in our large London Hospitals.

The statistical results obtained were offered as approximate conclusions to the truth, from data not sufficiently extensive to give such conclusions with absolute accuracy.

When the sanitary state of the ex-Bulgarian division of the army was contrasted with the Crimean, it was observed:—

1. That the admissions to Hospital were greater among the Crimean portion of the army than among the ex-Bulgarian, and contained a greater proportion of enteric diseases, cholera and scorbutus; while among the admissions from the ex-Bulgarian part, fevers and pulmonary diseases exhibited a higher ratio than in the Crimean part. 2. That while the admissions were greater from the Crimean portion, the mortality, compared with the amount of admissions, was much greater among the ex-Bulgarian portion of the army than among the Crimean. The causes of death which produced the greatest mortality stood in the following order:—1. Cholera. 2. Frost-bite. 3. Enteric diseases; and 4. Fevers among the ex-Bulgarian part; and, 1. Cholera. 2. Enteric diseases. 3. Fevers. 4. Frost-bite, among the Crimean troops.

With regard to fevers, it was observed that the pernicious influence of the residence in Bulgaria showed itself in the deteriorated constitution of the soldier; and while the admissions to Hospital were greater in proportion to strength among the ex-Bulgarian forces, the deaths were also more numerous, (the per-centage nearly doubled,) thus proving how readily that portion of the army succumbed to disease;—being “used up” when they left Bulgaria, they were less able to cope with disease, and more of them died. With regard to cholera, it was interesting to notice the similarity of pathological phenomena presented by the history of that disease in Bulgaria and in the Crimea, compared with its known phenomena as an epidemic disease. Up to and including the period from October till May, 1855, two separate epidemics may be said to have affected the army. The ex-Bulgarian campaigners were exposed to both of them. During the first epidemic, while in Bulgaria, they suffered severely; and, indeed, so long as they remained in the vicinity of Varna the disease never left their camps; they carried it with them to the Crimea, and it continued to seize upon and kill many victims on the march from Old Fort to Balaclava, and more especially after the battle of the Alma, and on the famous flank march, when the fate of the more feeble soldiers was at once sealed by death. The Crimean epidemics of cholera present the following remarkable antithesis, compared with the other classes of diseases:

1. The per-centage of admissions on the average strength of the troops serving in the Crimea only was much greater than the ratio of admissions among the ex-Bulgarian troops, and the per-centage of deaths from cholera was also greater in the former than among the latter.

2. But the per-centage of deaths, calculated on and compared with the admissions, was greater among the ex-Bulgarian forces than among the Crimean troops.

According to what is known regarding the nature of this remarkable disease, it may be noticed that already, during the Bulgarian campaign, the more susceptible of the troops had been seized with the disease, and many had already died. The disease, to use a common expression, “had worked itself out” upon them; so that fewer were in a condition to take the disease subsequently among the ex-Bulgarian troops while in the Crimea; and, therefore, fewer of this part of the army died in the Crimea from cholera, compared with the strength. On the other hand, it may be observed, that on account of the “used up” condition of the ex-Bulgarian troops, a much larger per-centage died among them of those who were attacked, than among those who were attacked among the Crimean troops. The ratio of admissions for pulmonary diseases was nearly the same in both divisions of the army; but the deaths among the ex-Bulgarian troops were greater than among the Crimean forces, and the numbers invalided were also greater among them. It would be interesting to know how far such affections were purely idiopathic, and how far a tendency to the development of tuberculosis had, or had not, been engendered by the Bulgarian or Crimean campaigns. In the personal experience of the author, as well as that of Dr. Fraser, of the North London Hospital, phthisis was a rare disease at Scutari. The period of latency of malarial poison is another topic deserving of special investigation in the experiences of the Bulgarian campaign. It is known that on the return of our troops from Walcheren, fresh cases of fever continued to occur so late as five, six, eight, nine, and even ten months afterwards, so that the persistent pernicious influence of the Bulgarian campaign was not without a parallel. The reduction of strength of the ex-Bulgarian part of the forces, compared

with the Crimean, is approximatively inferred from the following considerations, namely:—1. The actual deaths in each portion of the army, and the ratio of these to the admissions and to the original strength. 2. The ratio of deaths and invaliding, compared to the admissions, and to the original strength of each of the two divisions of the army. 3. The per-centage of drafts to recruit the strength of the troops in each of the two divisions of the army. 4. The actual loss of strength by sickness, deaths, and invaliding, in each of the two portions of the army if drafts had not arrived. The severe duties of the front being chiefly borne by that portion of the army which served in the Crimea only, the loss to the ex-Bulgarian part could not be said to be increased by the severe and necessary operations of war during the siege. Great as was the loss of the corps in front, it was much below what some of the corps suffered who were not in front, *e.g.*:—the 46th, the 95th, 63rd, 33rd, 23rd, 44th, 28th, and 50th regiments. The loss in these eight corps averaged seventy-five per cent. during the seven months (Colonel Tulloch); and it is worthy of notice that six out of these eight regiments were ex-Bulgarian forces; and with the exception of the 46th, whose great loss appears to have been from cholera immediately after their arrival, the cause of the great mortality among the other regiments is not accounted for. More full and accurate details will yet, no doubt, show how malarious influences imbibed in Bulgaria developed themselves by a zymotic-like action, under the melancholy state of things which Sir Alexander Tulloch and Sir John McNeill so energetically and boldly brought to light.

Dr. STEWART said the latency of diseases, especially those of an intermittent kind, was often overlooked; but had been clearly established in the paper. He (Dr. Stewart) had met with two cases in which malarious disease had remained latent for a long period prior to its manifestation. One was that of a soldier who, during the war in Spain, had been exposed to great privations and malarious influences of an intense kind, to which many of his fellow-soldiers had succumbed. It was not until thirteen or fourteen months after his exposure to those influences, that the intermittent disease declared itself, and then he experienced one of the most violent attacks he (Dr. Stewart) had ever seen. He remembered a similar case about two years ago in the Middlesex Hospital. The long residence of the troops in Bulgaria he thought one of the most culpable pieces of mismanagement; the authorities having been warned that the very places where the troops were encamped were those that ought especially to be avoided.

Dr. WEBSTER said it had been long observed that persons living in an unhealthy climate occasionally exhibited the effects of such residence after a considerable time had elapsed. He remembered the case of a child who, six weeks after her return from Lincolnshire, was attacked with ague, the disease having been no doubt induced by her residence in that county. In like manner persons residing in the malarious districts of Italy frequently gave no indications of disease till some time afterwards. As to the residence of the troops in Bulgaria, it was a military and political movement, and ought not to be regarded only in a sanitary point of view. He had heard it stated that the whole mortality of British troops in the Crimea from all causes, was less than 20,000 out of 102,000 men, a considerably less proportion than was consistent with the author's statements.

Dr. FRASER said he was one of the Medical officers at Scutari, and he did not agree with the author in thinking the Hospital an ill-chosen one. The Smyrna Hospital he considered badly selected. He had remarked the small number of cases of phthisis admitted; a proof, he thought, of the good selection of the recruits originally.

A paper by Mr. H. THOMPSON was then read

ON THE CONCRETIONS OF THE PROSTATE, THEIR MODE OF PRODUCTION, AND THEIR RELATION TO THE FORMATION OF PROSTATIC CALCULI—THE RESULT OF OBSERVATIONS MADE UPON UPWARDS OF FIFTY DISSECTIONS OF THE PROSTATE.

The existence of “concretions” of microscopic size has been established in every one of the fifty specimens of the prostate exhibited. In many their size was that of a poppy-seed. They had been found also in the organ at 14 years of age. Their physical and chemical characters (the latter by rigid analysis, were given at considerable length. Their existence was con-

cluded to be a necessary result of the performance of natural functions on the part of the prostate. After numerous observations it appeared that the formation of a concretion frequently originated in the aggregation of a yellowish matter often seen within the secreting nuclei lining the gland-ducts and pouches, often found free in yellowish granules, sometimes stuffing small ducts and follicles, and seen floating in the form of small prostatic fluid as well as in the contents of the vesiculæ seminales. In the larger masses of this yellow matter, entirely occupying the interior of crypts or follicles, the small granules may be seen cohering, or as if fusing together, and presenting an appearance identical with that which is often seen existing in the centre of fully formed concretions. It was concluded that the coalescence of these yellow granules, or of the nuclei charged with them, their partial fusion into a mass more or less homogeneous, the stratification in part of this mass itself, or more probably the deposit upon its surface of fresh layers of fluid matter similar to that which originally constituted the interior, and finally, some addition of opaque earthy matter to it, either by infiltration or accretion (through irritation of the secreting membrane around, from the pressure of the newly-formed body, as observed in numerous other instances referred to), were the steps by which the production of a "prostatic concretion" was very frequently accomplished, and its connexion with "prostatic calculus" illustrated. The views of other observers were quoted and discussed at considerable length. Numerous drawings of these bodies in various stages of formation, as well as the original objects themselves under microscopes, illustrated the communication.

Some further observations by Dr. ROBERT LEE were then read

ON THE USE OF THE SPECULUM

IN THE DIAGNOSIS AND TREATMENT OF UTERINE DISEASES.

The author referred to the tabular statement of two hundred and twenty cases of real and imaginary disease of the uterus, published in the 38th volume of the *Medico-Chirurgical Transactions*, and presented in a similar tabular form the details of eighty additional cases which had since come under his observation. Of the 300 patients, 47 were unmarried; one had barely completed her 18th year, several were under 20, and the majority under 30 years of age, and were suffering from hysteria, leucorrhœa, dysmenorrhœa, or some nervous affection of the uterus, without inflammation, ulceration, or any structural disease or displacement of the organ. In Case 256 the patient had been told that the womb was prolapsed and much ulcerated, and an instrument had been introduced for six weeks, with an aggravation of all the symptoms. The hymen was found so perfect on examination that it was impossible to reach the os uteri without using an unjustifiable degree of violence. On the ground of morality, and on every other ground, he could see no defence for the employment of the speculum in these 47 cases. Of the 300 patients 70 were barren, and the sterility was not removed nor the other symptoms relieved in a single instance. Several of these individuals spoke with horror and shame of the treatment to which they had submitted. A considerable number of the cases were suffering from cancerous disease, in all of which the symptoms seemed to have been aggravated by the treatment. In Case 236 the character of the disease was unmistakable, but after an examination with the speculum a favourable prognosis had been given, and the actual cautery employed for months, and hopes of recovery held out to the last. The author expressed his conviction, that neither in the living nor in the dead body had he ever seen a case of simple ulceration from chronic inflammation of the os or cervix uteri, and to apply the term to states of the os uteri in which the mucous membrane, or, as it is termed by some, the basement membrane is not destroyed by ulceration, was an abuse of language calculated only to deceive and mislead the members of the Medical Profession, from whom the truth has been carefully concealed. The speculum emanates from the syphilitic wards of the Hospitals at Paris, and it would have been better for the women of England had its use been confined to those institutions.

AMONG the passengers who left Southampton on Tuesday by the Brazilian steamer *Avon* were seventeen sisters of Mercy, who are gone out to attend the Yellow Fever Hospital at Rio de Janeiro.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS.

MEDICAL REFORM AND POOR LAW MEDICAL OFFICERS.

The following petitions were presented during the week:—Petitions, praying for relief, were presented by Mr. Hayter, from Medical Officers of the Union of Wells; by the Hon. R. H. Dutton, from Mr. W. H. Loveless, Medical Officer of the Stockbridge Workhouse; by Colonel Duncombe, from the Medical Officers of the Acomb district of the Great Ouseburn Union, and from the Medical Officers of the Leyburn Union, in Yorkshire; by Mr. C. Foster, from the Medical Officers of the Walsall Union; and by Sir A. Ramsay, from the Medical Officers of the Rochdale Union; by Mr. Headlam, from the Apothecaries' Society, against Lord Elcho's Medical Bill; by Mr. Buller, from John Thompson, Mayor of Bideford, and Practitioner of Medicine, in favour of the Medical Profession Bill introduced by Mr. Headlam; by Mr. Crawford, from William Coulson and other gentlemen, Medical Practitioners of the City of London, against Medical Bill No. 3, now before the House, and praying that Medical Bill No. 1 may be passed into a law.

The following petitions were presented—by Viscount Elmley, from Medical Officers of the Tenbury Union, in behalf of a law to ameliorate their position; by Mr. Buchanan, from Medical Practitioners, Glasgow, in favour of Mr. Headlam's Bill; by Mr. Fenwick, from Sunderland, in favour of the Medical Officers attached to Poor Law Unions; by Mr. W. Clive, from the Medical Officer of the Cleobury Mortimer Union, for redress of grievances; by Lord Althorp, from the Medical Practitioners of the district of Towcester, in the county of Northampton, in favour of Mr. Headlam's Medical Bill; also, from the Physicians and Medical Practitioners of Northampton, to the same effect; by Mr. B. King, from the Medical Officers of the Stratford-on-Avon Union, in favour of resolutions passed at a meeting of the Poor Law Union, assembled in London on May 28; by Colonel Freestun, from the Medical Officers of the Cerne, Romford, King's Lynn, Bridport, Kingston, Henstead, York, Woburn, Chelmsford, Weymouth (3), Ringwood, Taunton, Cleobury Mortimer, Bedford, Tendring, Market Bosworth, Kidderminster, Sedbergh, Mansfield, Rugeley, Rothwell district of Kettering, Axminster, and 4th district of Malmesbury, Poor Law Unions, praying for a redress of grievances; by Mr. M'Cann, from the Medical and Surgical Practitioners of Drogheda, in favour of the Medical Bill, No. 1 (Mr. Headlam's); from the same persons, against the Medical Bill, No. 3 (Lord Elcho's); by Sir Fitzroy Kelly, from the Medical Officers of the Hundred of Samford, in Suffolk, praying for a redress of grievances; by Mr. S. Fitzgerald, from Medical Practitioners at Horsham, for amendment of the laws affecting the Medical Officers of Poor Law Unions.

Petitions praying for the redress of grievances of Poor Law Medical Officers were presented by Mr. F. W. Russell, from the Physicians and Surgeons of the Limerick Union, praying that the salary of Dispensing Medical attendants be not less than £100 per annum; by Mr. Dodson, from the Medical Officers of the East Grinstead Union; by Lord Cavendish, from the Medical Officer of the Ulverstone Union; and by Mr. Kendall, from Medical Officers in the St. Colomb and Bodmin Unions, in the county of Cornwall; by Mr. G. S. Beecroft, from the Medical Officers of the Poor Law Guardians, Leeds, praying for the removal of the grievances under which they labour; by Mr. Alcock, from Poor Law Medical Officers of Clapham, for redress of grievances; by Mr. Buller, from Ebenezer Davies, Surgeon, of Holecumbe Rogus, Devon, Medical Officer of district No. 5 of the Wellington Union, in Somersetshire, praying for redress of the grievances affecting the Medical Officers of Poor Law Unions.

WORKHOUSES AND MEDICAL RELIEF IN IRELAND.

Mr. FAGAN rose to call the attention of the House to the present state of the workhouse system in Ireland, together with the laws relating to Medical charities and the relief of the sick poor, and also to move for a Select Committee to inquire into the whole subject. In the Irish workhouses, which could accommodate 300,000 poor, there were at present, owing to the improved condition of Ireland, only 50,000, of whom a large portion consisted of women and children, a third of that number being inmates of the Work-

house Hospitals. The hon. member referred to the second report by the Poor Law Commissioners upon Medical charities, and expressed his entire concurrence in the recommendations which those gentlemen had offered. His plan was that a portion of the workhouses should be set entirely apart—cut off, as it were—and appropriated as infirmaries for the sick poor. The boards of guardians should not be the governors of these infirmaries, but in the same manner as dispensary committees applied to the guardians for the means of support, the governors of the infirmaries should apply to them. The boards of guardians were not, however, to have the management of the infirmaries. By these means he thought that the feeling which now existed, in reference to these workhouse Hospitals, would be removed. He suggested that payments from the sick poor might be permitted for Medical treatment in the infirmaries. Great abuses existed in the dispensary system in consequence of wealthy farmers receiving tickets, entitling them to be visited in sickness by the physicians of the dispensaries, and he was of opinion that with the institution of infirmaries having accommodation for the reception of patients, this abuse, in respect to visiting tickets, would cease. With respect to the payment of Medical officers, he had always thought it singular, that the Medical officers attending the unions in England should be paid out of the consolidated fund, and in Ireland out of the rates. The hon. gentleman concluded by moving for the appointment of a Select Committee to consider and inquire into the present state of the workhouse system in Ireland, and the operation of the laws relating to Medical charities, and the relief of the sick poor.

Mr. H. HERBERT agreed in the observations of his hon. friend with regard to the infirmary system, which he believed had operated with great injustice in many districts of Ireland; and if a fair proposition could be made for the alteration of that system it would, in his opinion, deserve the most serious consideration of the House. He could not pledge the Government to any action during the present session, but he thought the House was in possession of documentary evidence amply sufficient to justify legislation. The hon. gentleman was doubtless aware that fever hospitals had already been established in a great majority of the Irish Poor Law unions, and the last Report of the Poor Law Commission showed that the system of Medical relief had been extended, and was in the course of extension, in Ireland. It was quite true that many of the admissions to the workhouse hospitals were not strictly legal, and he therefore deemed it desirable that a change should be made in the law; but he thought that great caution should be exercised in interfering with the operation of the Poor Law, which was at present working so satisfactorily. Without saying, that he believed it possible in the present session to legislate in the direction to which his hon. friend had pointed, he might state that the attention of the Government had been turned to the subject, and that, in his opinion, the time had come when they might hope to have a measure proposed for carrying into effect the views which had been so ably and so temperately laid before the House. Under these circumstances he hoped that his hon. friend would not press his motion for a committee. (Hear, hear.)

Mr. FAGAN said that, after the statement of the Secretary for Ireland, and on the understanding that the Government would as soon as possible take the subject into their own hands, it was not his intention to press his motion to a division. The motion was accordingly withdrawn.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise on June 11th, 1857:—

BARNES, JAMES HINDMARSH, Bath.
 BIRD, WILLIAM, Stroud, Gloucestershire.
 CURRAN, WILLIAM, Youghall, Ireland.
 HETHINGTON, JOSEPH, Lampleigh-hall, Cumberland.
 JEAFFRESON, GEORGE EDWARDS, Framlingham, Suffolk.
 MARSHALL, ALEXANDER WILSON, Birkenhead.
 POPE, JOSEPH JOHN, Liverpool.
 REES, HUGH, Carnarvon.
 VINRACE, JOHN, Ashby-de-la-Zouch.
 WATKINS, JOHN WEBB.

ROYAL COLLEGE OF SURGEONS.—The following members of the College, having undergone the necessary examinations, were admitted Licentiates in Midwifery at the meeting of the Court of Examiners on the 9th inst:—

BRAYTON, JONATHAN, Whitehaven.
 GRIFFITHS, RICHARD, Dolgelly, Merionethshire.
 JAMES, HERBERT, Merthyr Tydfil.
 JONES, JOHN EDWARDS, Dolgelly, Merionethshire.
 JONES, WILLIAM GOODALL, Birmingham.
 KENDALL, THOMAS MASTERS, King's Lynn.
 M'DOUAL, ALEXANDER MASON, Guy's Hospital.
 O'REILLY, JOHN, Ware, Herts.
 POPE, JOSEPH JOHN, Hampstead-road.
 PRALL, SAMUEL, Rochester, Kent.
 TAYLOR, ADAM, Norwich.
 THOMAS, JOHN LITTLE, Carmarthen.
 WARD, ISAAC DUNLIN, Clifton, near York.
 WINSTANLEY, ROBERT, Wigan, Lancashire.
 WINTERBOTHAM, LAURISTON, Cheltenham.

The following members of the College, having previously been balloted for, were admitted Fellows at a meeting of the Council on the 10th inst:—

BAXTER, FRANCIS HASTINGS, 6th Enniskillen Dragoons.
 EVANS, ALFRED, Walthamstow.
 GILLAM, ISAAC JOHN, Bath.
 JONES, ARTHUR O'BRIEN, Epsom.
 KENDALL, THOMAS MASTERS, King's Lynn.
 LEAH, THOMAS COOPER, Hyde.
 NASH, GEORGE JAMES, Isle of Man.
 SHILLITO, W., Hon. East India Company's Service, Bengal.
 SPENCE, JOHN, Otley, Yorkshire.
 TUVAN, JAMES, Chesham-street.

The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 12th inst:—

ADAM, EDWARD, Dublin.
 AGAR, WALTER JAMES, Cork.
 CATLING, GEORGE TAYLOR, Islington.
 EGAN, CHARLES JAMES, Dublin.
 FISHER, WILLIAM SHUTE, Charleville, Cork.
 HOBSON, GEORGE WILLIAM, Aberdeen.
 HUGHES, ROGER, Bala, North Wales.
 SHOOTER, CHARLES, Bishop Wilton, Yorkshire.

COLLEGIATE ELECTION.—The annual meeting of Fellows of the Royal College of Surgeons will take place on Thursday, the 2nd July, for the election of three fellows into the Council of the College, in the room of two members going out in rotation, and of Robert Keate, Esq., a life-member, resigned. The Fellows' dinner takes place the same evening at the Freemasons' Tavern, Samuel Smith, Esq., of Leeds, in the chair.

DEATH.

MAGRATH.—On the 12th May, at Plymouth, Sir George Magrath, Bach. Comp. Bath. Knt. Hanover, F.R.C.P. Edin.; F.R.C.P. Lond.; Insp. H.M. Fleets and Hosps.; F.R.S., F.L.S., M.R.I.A., F.R.G.S.

TESTIMONIALS.

TESTIMONIAL TO THE LATE E. J. SCOTT, ESQ., M.D.—A meeting of the friends and admirers of the career of this eminent gentleman assembled at the Royal Portsmouth, Portsea, and Gosport Hospital, on Tuesday afternoon last, for the purpose of receiving a bust, to be placed in that institution, commemorative of the great services and many benefits conferred upon it by the late Dr. Scott. The bust is in white marble, standing on a black marble pedestal, upon which is carved the borough arms, and underneath is the following inscription:—"This bust of the late E. J. Scott, Esq., M.D., is presented to the Royal Portsmouth, Portsea, and Gosport Hospital, by Sir Charles Ogle, Admiral of the Red, and other friends, as a tribute of respect to his memory, and to mark their high sense of the important services gratuitously rendered to this institution by him from its formation to the day of his death, 1857."

METROPOLITAN FREE HOSPITAL.—The anniversary dinner in aid of the funds of the above charity took place on Wednesday at the London Tavern, under the presidency of

Lord J. Russell. Among the company were the Princes of Oude, with a numerous retinue. A collection was made, which resulted in an addition of nearly £1400 to the funds of the charity, including £20 from the Princes of Oude, and £10 from the Nawaub of Surat.

ST. BARTHOLOMEW'S HOSPITAL.—A very crowded *conversazione* was held in the hall of this institution on Tuesday evening, on the invitation of the treasurer. The hall was most profusely decorated with photographs, water-colour drawings, etc., while on tables running throughout the hall were some beautiful photographs of distinguished statesmen and others by Mayall, stereoscopes, with views and fancy groups, microscopes, etc. Perhaps the most interesting exhibition in the room was that exemplifying the artificial production of salmon. Thus was shown the ova preserved in gelatine, which, after being placed in a river, produce in a few weeks the most minute of the fish tribe, from whence it takes the form of what is called parr, a fish not exceeding three or four inches in length. So it continues for twelve or fifteen months, when it changes its scales so as to protect it from the action of the salt water, and makes to sea, returning to its native waters in about six weeks a noble fish of 15lb. or 20lb. weight; and, should it remain unmolested, again, in the following year, it goes to sea, returning once more as a fish twelve inches broad. The inspection of these specimens could not fail to produce speculations as to how much may be done, by a little judicious regulation with regard to fishing in certain waters at fixed periods of the year, to produce for the public an immense supply of food at moderate prices. So successful, indeed, is the artificial breeding of salmon become in France, that whereas a few years ago it was difficult to procure this fish in Paris for less than 3s. or 4s. per lb., it has this season been selling as low as 6d. per lb.

THE LONDON HOSPITAL MEDICAL COLLEGE.—A session for the distribution of prizes to the students of this college was held on Monday at the London Hospital. Mr. Robert Hanbury (in the unavoidable absence of the Marquis of Blandford) presided. A letter from the noble Marquis, alleging his necessary attendance at a committee of the House of Commons as the reason for his not being able to assist in the proceedings of the day, having been read, the following gentlemen, who had obtained prizes, were introduced by their respective professors, and received the medals and certificates which had been awarded to them:—

Clinical Medicine (and for "zeal and talent, and humanity towards the patients").—Gold Medal (presented by the Governors of the Hospital)—Mr. T. E. Rutledge, Farringdon.

Clinical Surgery (and for "zeal and talent, and humanity towards the patients").—Gold Medal (presented by the Governors of the Hospital)—Mr. G. E. Farr.

College Class of Medicine.—Senior Gold Medal—Mr. J. S. Hawkins, London. Junior Silver Medal—Mr. E. A. Page, Bedworth. Junior Certificate—Mr. H. P. Major, Hungerford.

Surgery.—Senior Gold Medal—Mr. M. Mackenzie, Woodford. Senior Certificate—Mr. F. E. Ryott, Newbury. Junior Silver Medal—Mr. F. E. Ryott, Newbury. Junior Certificate—Mr. J. W. Kay, Huddersfield.

Anatomy and Physiology.—Senior Gold Medal—Mr. E. H. Lloyd, Thornbury. Senior Certificate—Mr. F. G. Graves, London. Junior Silver Medal—Mr. L. B. Brunton, London.

Midwifery.—Certificate—Mr. J. S. Hawkins, London.

Chemistry.—Silver Medal—Mr. H. P. Major, Hungerford. Certificate—Mr. F. E. Ryott, Newbury.

Forensic Medicine.—Silver Medal—Mr. J. S. Hawkins, London.

Materia Medica.—Silver Medal—Mr. E. A. Page, Bedworth. Certificate—Mr. F. E. Ryott, Newbury.

Botany.—Silver Medal—Mr. W. Rivington, Holloway. Certificate—Mr. F. G. Graves, London.

A vote of thanks to the Chairman was carried by acclamation. Mr. Hanbury, in returning his acknowledgments, said he had been connected with the Hospital for upwards of forty years, and had felt it his duty to give it all the support in his power in return for the kind and skilful attendance which had been invariably bestowed on those persons whom, by reason of his extensive establishment, he was often obliged to send for Medical relief to be administered to them.

THE GLASGOW ROYAL INFIRMARY has received £1000 as a grant by the trustees of the late John Ferguson, Esq., of Cairnbrock.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—The annual meeting of the governors and friends of this Hospital took place on Saturday in the Board-room, King William-street, Strand, his Grace the Duke of Richmond in the chair. C. G. Guthrie, Esq., read the Medical Report, from which it appeared that the number of persons who have been admitted during the past year to the benefits of this Hospital has been 6027, of whom 103 were received into the institution as in-patients, and 5924 were treated as out-patients, being an increase of 89 patients over the preceding year, 1855. The principal operations have been 60 for cataract, of which 28 were cases of capsular and soft cataract; 32 cases of hard cataract, 30 of which were cured by the operation of extra-ction and two by that of depression. There have been 7 operations for the formation of artificial pupil, and 7 for the removal of the deformity of staphyloma, and 214 for strabismus. The Report of the Committee stated that the Hospital has been supported at an expense of £1016 4s. 9d., for the year ending 31st December, 1856, leaving a deficiency of assets for the current year of £71 10s. 3d. An Inalienable Fund, and also a fund called the "Guthrie Fund," has been formed in the names of Colonel Wood, Colonel Thomas Wood, Sir John Swinburne, Bart., and Lewis Powell, Esq., trustees. The money contributed to the Inalienable Fund has been invested in the Three per Cent. Consols, and the interest only is permitted to be appropriated for the general purposes of the Hospital. The Guthrie Fund is a new fund, formed at an annual meeting of the governors, held on the 3rd June, 1856, in order to perpetuate their regard for the memory of the late Mr. Guthrie; a subscription was entered into (by the noblemen and gentlemen then present), to be applied in aid of the Inalienable Fund, the principal of these two funds forming a permanent capital.

STUDENTS AT THE GERMAN UNIVERSITIES.—The *Moniteur des Cours Publiques* gives the following as the number of students at the German Universities in 1856, with the exception of Vienna:—

	Germans.	Foreigners.		Germans.	Foreigners.
Berlin	211	54	Kiel	38	4
Bonn	90	6	Königsberg	81	4
Breslau	128	14	Leipsic	167	59
Erlangen	102	4	Marburg	65	8
Fribourg	44	4	Munich	202	37
Giessen	121	25	Rostock	19	—
Gottingen	77	78	Tubingen	100	11
Greisswald	99	2	Wurzburg	97	222
Halle	47	—			
Heidelberg	60	61		1786	604
Jena	38	11			
				2390	

ACADÉMIE DES SCIENCES.—The Section of Physies presented the following list of candidates for the place of Corresponding Member, left vacant by the death of Melloni:—In the first rank, M. Neumann, of Königsberg. In the second rank, arranged alphabetically, Dove of Berlin, Grove of London, Henry of Philadelphia, Jacobs of Petersburg, Magnus of Berlin, Matteucci of Pisa, Plucker of Bonn, Riess of Berlin, Stokes of Cambridge, and Weber of Gottingen. The Académie, however, has not followed the recommendation of the Section, M. Matteucci having obtained thirty votes to M. Neumann's fifteen.

BANQUETS OF THE SCIENTIFIC PRESS AT PARIS.—At the suggestion of M. Figuier, who writes the scientific articles in *La Presse*, the editors and chief contributors of the scientific and medical journals have commenced a series of monthly dinners. The chief toast at the last was—"The scientific press, and may the extension of its influence spread more and more among the public the taste for scientific pursuits." Amateur singing, and a *conversazione* after dinner, contributed to a very pleasant evening, and the reconciliation of some old animosities.

THE SMALLPOX has broken out with considerable severity at Britonferry and Aberavon, in Glamorganshire, where it has shown itself with such virulence as to induce a house-to-house visitation. The Neath Board of Guardians have urged the necessity of an immediate recourse to vaccination.

THE yellow fever which had appeared among the ships in port at Rio, was daily diminishing by the last reports.

CHARITABLE USES BILL.—Mr. Atherton's Bill, after reciting the 9th George II., cap. 36, and the 9th George IV., cap. 85, enacts that no past or future deed for charitable uses, upon valuable consideration, shall be void if enrolled in Chancery, and that no past or future deed for charitable uses, not upon valuable consideration, shall be void by reason of not being indented, or of non-compliance with the formalities required by the 9th George II., cap. 36. There are other provisions of detail respecting such deeds. The Act is not to extend to Scotland or Ireland, nor to prejudice the two Universities or the Colleges of Eton, Winchester, or Westminster.

THE Royal West India mail packet La Plata arrived at Southampton on Sunday. She brings news of the continuance of the yellow fever in the West Indies. When she left it was chiefly among the shipping at St. Thomas and Martinique; the other parts of the West Indies appear to be free from it. All the persons belonging to the Parana, the last homeward mail steamer, who were struck with yellow fever, and left behind at St. Thomas, are dead. Soon after the La Plata left St. Thomas, yellow fever made its appearance among the crew, and nearly forty persons were laid down with it. Every endeavour was made to stop its ravages and mitigate its severity. The utmost care was taken in ventilating the ship, cleansing it with disinfecting substances, and nursing and consoling the sick. Out of the whole number attacked only six died on the passage.

MEDICAL EDUCATION IN DUBLIN.—The Governors of Dr. Steevens's Hospital, in compliance with the recommendation of the Dublin Hospital Commission, have determined to follow the example of this metropolis, in combining elementary and hospital instruction in the same institution, and to establish a complete school of medicine and surgery in connexion with the Hospital. The following Professors have already been elected:—Practice of medicine, Dr. H. Freke and Dr. W. M. Burke; surgery, Mr. W. Colles and Mr. Wilmot; anatomy and physiology, Mr. S. A. Cusack; descriptive anatomy, Dr. E. Hamilton; midwifery, Dr. Hardy. A spacious theatre, dissecting room, and museum are being built on the grounds of the hospital, which, with the midwifery branch of the establishment under the superintendence of Dr. Hardy, will render the institution as complete a Medical school as any of those in connexion with the metropolitan hospitals.

TRANSACTIONS OF THE SWEDISH SOCIETY OF PHYSICIANS.—During the year 1855-6 the following foreign (honorary) members were elected by the Society:—Dr. F. Heller, superintendent of the chemico-pathological laboratory in the Hospital at Vienna; Dr. William D. Moore, of Dublin, and Dr. Charles Wilson, of Edinburgh, both reviewers of Swedish Medical works in English Medical journals, and distinguished for several valuable contributions to the literature of their own country; Dr. Robert Christison, Professor of Clinical Medicine and Materia Medica in Edinburgh; Dr. Allen Thompson, Professor of Anatomy and Physiology in Glasgow; Dr. Charles West, Physician to the Hospital for the Diseases of Children in London; Professor James Syme, of Edinburgh; Dr. Edwin Lankester, of London; Dr. C. Sperino, of Turin; Dr. Erlenmeijer, superintendent of an institution for cerebral and nervous diseases at Bendorff, near Coblenz; Dr. E. Cornaz, of Neufchatel; Dr. C. Hempel, of Copenhagen, editor of the *Ugeskrift for Læger*; Councillor of Health; Dr. H. Berend, of Berlin; Valentine Mott, Professor of Surgery in the University of New York, and Dr. Anton Eberle, of Teplitz.—*Hygiea*, November, 1856.

MEDICAL REFORM.—At an adjourned General Meeting of the Metropolitan Counties Branch held on Tuesday, May 26th, at 4 p.m., after considerable discussion, the following resolutions were proposed and agreed to, on the motion of Dr. Lankester: "That this Meeting urge the necessity of the following alterations:—1. That the Medical Council consist of persons of whom at least one-third be nominated by Government from among members of the Profession not constituting the governing bodies of the Corporations and Universities. 2. That persons who have taken a degree in Medicine in any University of the United Kingdom be not required to undergo any further examination in order to obtain a licence from the Colleges of Physicians to practise their Profession in accordance with the by-laws of the College from which they obtain their licence. 3. That persons already in practice in Great Britain with the degree of a British University shall be able to register themselves as

Physicians at the time of passing and at any time after the passing of the Medical Act. 4. That the Apothecaries' Society of Dublin, being a purely trading body, has no claim to be represented in the Medical Council of the United Kingdom." Dr. Murphy proposed the following resolution, which was seconded by Dr. Ward, and carried: "That this Branch has observed with surprise that in Mr. Headlam's present Bill, Clause xv. and Schedule C altogether exclude the graduates in Medicine at present in practice from the register, unless examined and licensed by the Royal College of Physicians; and, further, that Clause xxiv., regarding the names to be struck off the register, is most ambiguously expressed; and they are of opinion that the words, 'Provided always that the name of no person shall be erased from the register on the ground of his adoption of any theory in the practice of Medicine or Surgery,' should not be inserted."

LONGEVITY OF MEDICAL MEN.—There are now living (and with three exceptions still residing in one of the eastern counties) ten members of the Medical Profession whose united ages amount to 810 years, averaging 81 years. And within the last sixteen months three have died whose united ages amounted to 339 years, or an average of 84 years 9 months.—*From a Correspondent.*

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 13, 1857.

BIRTHS.

Births of Boys, 824; Girls, 778; Total, 1602.
Average of 10 corresponding weeks, 1847-56, 1396.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	519	415	934
Average of the ten years 1847-56	...	...	951
Average corrected to increased population	...	...	1046
Corrected average for corresponding week in ten years 1847-56	499.4	451.4	950.8
Deaths of people above 90	...	...	1
Deaths in 13 General Hospitals	43	19	62

DEATHS REGISTERED DURING THE WEEK.

		In the Week ending Saturday, June 13, 1857.						Averages of Temperature and Deaths in 10 Weeks.
		Deaths of Persons.						
CAUSES OF DEATH.	AT ALL AGES.	Under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.	At 80 Years of Age and Upwards.		
Mean Temperature	56°0						56°8	
ALL CAUSES	934	446	138	160	147	38	950·8	
SPECIFIED CAUSES	927	445	137	160	147	38	944·1	
DISEASES:—								
1. Zymotic Class	164	136	10	8	10	..	222·8	
2. Dropsy, Cancer, and others of uncertain seat	54	12	7	16	16	3	42·1	
3. Tubercular Class	208	91	70	37	10	..	190·4	
4. Of Brain, Nerves, etc. ..	96	51	8	15	19	3	110·8	
5. Of Heart, etc.	44	5	6	16	15	2	35·6	
6. Of Respiratory Organs ..	119	59	10	20	23	7	118·2	
7. Of Digestive Organs	70	30	8	21	9	2	57·5	
8. Of Kidneys, etc.	17	1	3	7	5	1	12·5	
9. Of Uterus; viz.—Puer- peral Disease, etc.	11	2	4	5	..	..	8·3
10. Of Joints, Bones; viz.— Rheumatism, etc.	7	1	..	2	4	..	7·8	
11. Of Skin, etc.	4	2	2	..	..	..	1·7
12. Malformations	1	1	..	..	..	..	3·5
13. Debility from Premature Birth, etc.	23	23	..	..	..	..	24·1
14. Atrophy	22	12	..	..	10	..	26·1
15. Age	36	..	..	..	17	19	36·3
16. Sudden	16	7	4	..	5	..	10·6	
17. Violence, Privation, etc. .	35	12	5	13	4	1	35·8	
CAUSES NOT SPECIFIED. .	7	1	1	..	..	..	6·7

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29.758 in.
Mean temperature	56.0
Highest point of thermometer	70.9
Lowest point of thermometer	38.9
Mean dew-point temperature	48.9
General direction of wind	S.W. & S.E.
Whole amount of rain in the week	0.71
Amount of horizontal movement of air in the week	930 miles.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population. 1851.	Small- pox.	Measles.	Scar- latina	Whoop- ing- Cough.	Dia- rrhoea.	Ty- phus.
West	376,427	..	2	1	4	1	1
North....	490,396	..	5	3	9	3	7
Central ..	393,256	..	11	2	15	1	6
East	485,522	..	8	5	16	9	6
South	616,635	..	2	3	4	6	9
Total..	2,362,236	..	28	14	48	20	29

TO CORRESPONDENTS.

Mr. Liddell.—There is a large quantity of arsenic in the specimen of green wall paper forwarded to us.

Mr. W. Taylor.—Neither Bill can act retrospectively. The examinations, however, may vary in the course of three years.

Dr. Budd's paper on Cancer of the Liver shall appear in an early number.

A Half-Pay Officer and Great Sufferer.—We do not prescribe in the *Medical Times and Gazette*. Consult any respectable practitioner, who will consult with some surgeon who has paid special attention to diseases of the ear, if necessary.

Query.—*Mr. Ballard*, 45, Park-street, Grosvenor-square.

Mr. Moore, Bourton.—If *Mr. Moore* had been a regular reader of this journal he would have seen abundant reason to avoid the institution in question.

MEDICAL REFORM.

Fair Play.—We give this scheme at the desire of our Correspondent, not that we think his proposals are likely to be well received.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Your sentiments in to-day's *Medical Times*, respecting the propriety of the Profession at large, and not merely the heads of it, being consulted in the forming of any future Medical Reform Bill, will, I am sure, meet with the approbation of all who have not some special and profitable connexion with either of the Corporations. Let me suggest through your columns a feasible method of consulting the whole of the Profession.

A few of those members of Parliament who take particular interest in the question should be formed into a Committee, and announce through the *Medical Journals*, first, their readiness to receive up to the end of October any suggestions that may be forwarded to them touching the various points that have to be legislated upon. Secondly, a prize should be offered by them for the best, and a smaller prize for the second best Medical Reform Bill sent in to them by the end of October, the decision to be given by the Committee before the 1st of January next.

In this way a number of valuable suggestions might be obtained, and a satisfactory Bill brought forward at the commencement of the next Session.

In the Bills competing for the prize, the question as to how the interests of the Profession, the Public, the Corporations, are to be reconciled in points upon which they are at present apparently in antagonism, must be solved.

Many other points, some of which are not touched upon in the Bills now before Parliament, will no doubt suggest themselves to the mind of the writers.

June 13, 1857.

I am, &c.

FAIR PLAY.

A Country Practitioner.—The dose of the ethereal oily extract of the male fern is about half-a-drachm.

An Assistant-Surgeon.—The best works on Comparative Anatomy are *Owen's Lectures on Comparative Anatomy*, and *Ryder Jones on the General Structure of the Animal Kingdom*.

Mr. Barton.—It is contrary to our practice to recommend any particular Surgeon. Consult the London and Provincial Medical Directory, or inquire of the local practitioners.

POOR LAW MEDICAL REFORM ASSOCIATION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I shall feel obliged for space to inform the Poor-law Medical officers that all the reports of our late meeting were circulated agreeably to the new postal regulations, which require only one penny to be paid for each packet under four ounces, and that the petition to Parliament, though written and enclosed with the report, is treated as printed matter. I mention this circumstance as I regret to find a great many Medical officers have been surcharged two-pence, through the ignorance or cupidity of the local post-masters, who could not or would not understand that an envelope with the ends cut open is the same as a piece of paper wrapped round the report. Previous to their transmission I enclosed a

specimen of the documents to the General Post Office, and was informed that one penny would free them: the overcharged two-pences are all recoverable.

Since our meeting, on the 28th ult., thirty-six Unions, then on the black list, have joined the Association, and I have accounts of 125 petitions already presented to Parliament in support of our general petition, and others are going in daily.

Mr. Drummond, in his address to the House on Friday, June 12th, said, "The same principle regulated the allowances made to the doctors, which were reduced to so low a sum that it was utterly impossible for those gentlemen to attend properly to the duties of their position upon such terms, and everybody accustomed to attend these Boards must have noticed that when physic was prescribed to a sick man in the workhouse the Guardians had no objection to it, but when wine or other nourishment was ordered they usually rose against it."—See *Times*, January 13.

I am, &c.

RICHARD GRIFFIN.

12, Royal-terrace, Weymouth, June 16, 1857.

Philologus.—Orthopædic is derived from *orthos*, straight, and *païs, païdos*, a child.

Dr. Cotton's Notes on the Use of Glycerine in Phthisis shall appear next week.

J. G. H. would scarcely take a fee from his Medical friend, and legally he could not claim one, unless he could prove that he was sent for at the desire of the patient.

A Poitrinaire.—The northern parts of the metropolis are exposed to cold winds, especially in winter; and the southern and south-western parts are certainly better suited to those who are subject to pulmonary disease.

A Sufferer.—We know nothing whatever of the individual in question; but the fact that he advertises to cure disease by secret remedies is sufficient to induce us to advise our correspondent to avoid him.

Botanicus.—The bamboo belongs to the family of the grasses.

J. C.—We never heard of the least difficulty in procuring lymph from the Vaccine Institution, Russell-place, Fitzroy-square.

The conclusion of *Dr. Fenwick's paper on Chloroform* is unavoidably delayed until next week.

Reports of the Pathological, Epidemiological, and Norwich Pathological Societies, are in type.

COMMUNICATIONS have been received from—

Dr. BUDD; *Dr. RIGBY*; *Dr. LAYCOCK*; *Mr. PAGET*; *Dr. PAGET*, Cambridge; *Dr. LEET*, Dublin; *Mr. RODGERS*; *Dr. QUAIN*; *Dr. LEARED*; *Mr. OBIE*; *Mr. TEALE*; *Dr. COTTON*; *Mr. ROWDON*; *Dr. RUMBALL*; *Mr. GRIFFIN*; *Dr. PRETTY*; *Mr. H. H. WATSON*; *Dr. J. F. CHURCHILL*; *Mr. HOLLAND*; *Mr. COMPTON*; *Mr. OLDFIELD*; *Mr. DUNSMORE*; *Mr. E. MCSORLEY*; *Dr. OGILVIE*; *Dr. R. COULSON*; *Mr. E. COLYER*; *Mr. T. JACKMAN*; *Dr. T. T. SIMPSON*; *Dr. R. A. SHELDON*; *Mr. WARBURTON*; *Mr. H. GREENWOOD*; *Mr. J. SERJEANT*; *Mr. OVERTON*; *Mr. FOGGITT*; *Mr. J. HADDEN*.

APPOINTMENTS FOR THE WEEK.

20. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing Cross, 1 p.m.

22. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.; Orthopædic Hospital, 3 p.m.

23. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m.: *Dr. Handfield Jones*, "On recent Aguish Disorder in London;" *Dr. Edward Smith*, "On the Closure of the Upper Orifice of the Larynx in expulsive efforts;" *Mr. E. Furley*, "Case of Hysterical Tetanus," and others.
ZOOLOGICAL SOCIETY, 9 p.m.

24. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 3 p.m.
ROYAL SOCIETY OF LITERATURE, 8½ p.m.
SOCIETY OF ARTS. Anniversary, 4 p.m.

25. Thursday.

Operations at St. George's, 1 p.m.; Middlesex, 12½ p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.
ROYAL SOCIETY CLUB. Anniversary, 6 p.m.
NUMISMATIC SOCIETY. Anniversary, 7 p.m.

26. Friday.

Operations at the Moorfields Ophthalmic, 10 a.m.; Westminster Ophthalmic, 1½ p.m.

EXPECTED OPERATIONS.

At St. Bartholomew's, on Saturday, this day, two amputations of the thigh are to be performed. Next Tuesday, at the Westminster, *Mr. Holt* has an excision of the knee-joint, removal of a tumour from the elbow, and amputation of a diseased finger.

ORIGINAL LECTURES.

LECTURE
ON
THE STRUCTURE AND PHYSIOLOGY OF
THE OVARIA.

BEING ONE OF THE LUMLEIAN LECTURES READ BEFORE THE

Royal College of Physicians,

By ROBERT LEE, M.D., F.R.S., ETC.

LECTURE II.

Mr. PRESIDENT:—It has been established, in little more than a quarter of a century, that unimpregnated human ova escape periodically from the ovaria by the spontaneous opening or bursting of the Graafian vesicles, and that all the phenomena of menstruation are connected with this process or dependent upon it. The circumstances which led to the discovery of the facts upon which this conclusion is founded—what is commonly called the Ovular Theory of Menstruation, I now proceed to relate.

In the year 1830, I undertook to write an account of the structure, functions and diseases of the ovaria for the Cyclopædia of Practical Medicine. Two years and a half were spent upon this task, and the article was published on the 1st of April, 1833. When examining the various works which had been written on the anatomy and physiology of the ovaria, I was very much surprised to find that no one had ever proceeded to investigate the condition of these organs during menstruation. The function of menstruation had been attributed to different hypothetical causes—as the influence of the moon. *Luna vetus, vetulas, juvenes nova luna repurgat*, was an opinion which had been reduced to a proverb, and believed by the vulgar for many ages. Some thought the menstrual fluid was the excretion of a noxious substance from the uterus, and this notion was at one period so prevalent that in cases of amenorrhœa, issues were made in various parts of the body to allow the noxious humours to escape—a practice more rational than rubbing the lining membrane of the uterus with lunar caustic to excite a menstrual effort, as has been recently recommended and practised; or rubbing the os uteri with potassa fusa and other escharotics, or the actual cautery, and causing the part to slough for abrasions of the epithelium and imaginary ulcerations. Others thought that menstruation was merely the discharge of a superfluous quantity of blood from the uterus, or referred it to fermentation, or to some inexplicable molimen. Dr. Cullen, however, inferred from various circumstances he had observed, “that the state of the ovaria had a great share in exciting the action of the uterine vessels, and producing the menstrual flux.” Whether any writer before Dr. Cullen had traced a relation between the condition of the ovaria and this function of the uterus I have not been able to ascertain. In 1814 I heard the late Dr. Gregory state in his Lectures at Edinburgh, of which I preserve a copy taken in short-hand, when commenting upon this passage in Cullen’s First Lines, that all the symptoms of chlorosis and amenorrhœa were to be attributed to the want of the due evolution of the ovaria. He pointed out as a fact that some puny little girls at the age of maturity suddenly acquired plumpness and strength, and menstruated regularly and easily; others, who were in excellent health about the time of puberty, grew feeble and pale, and did not menstruate. Dr. Gregory quoted Mr. Pott’s case of a young woman whose ovaria were extirpated by him in an operation for inguinal hernia, in whom menstruation ceased, the voice became hoarse, the mammae shrunk, and hair appeared on the chin and upper lip. Before this period this female was stout, large-breasted, and menstruated regularly. Dr. Gregory likewise mentioned the case of a young woman who died at the age of 29, in whom the ovaria were wanting, which was published by Mr. Charles Pears in the Second Part of the Transactions of the Royal Society of London for 1805, in which the following appearances were recorded:—“Having ceased to grow at 10 years of age, she was in stature not more than 4 feet 6 inches high; the breadth across the shoulders was not more than 14 inches; but her pelvis measured only nine inches from the ossa ilia to the sacrum. Her breasts and nipples never enlarged more than in the male subject; she never menstruated;

ated; there was no appearance of hair on the pubis, nor were there any indications of puberty in mind or body at 29 years of age.”

Dr. Gregory adduced these cases to prove that, if the ovaria were removed or wanting, there would be no menstruation. He said it was impossible to contrive a more complete case than that of Mr. Pott’s, in which the castration of a young woman was performed, and the effect, he said, was just the reverse of castrating a boy. He further mentioned the case of a young lady, who had come under his own observation, in whom there was no menstruation, and who had not the usual development; he suspected the ovaria were wanting; there were no mammae; she never became a woman; no evolution of the mental faculties. This person died at the age of 18, but her body was not examined; and neither Drs. Cullen nor Gregory stated that they had ever examined the ovaria of any individual who had died during menstruation. Nothing more was known at this time respecting the structure and functions of the ovaria than had been pointed out by De Graaf in 1672, and his statements were not believed till the close of the last century.

In 1821, Dr. John Power published an essay, “On the Periodical Discharge of the Human Female, with new Views of its Nature, Causes, and Influence on Disease:”—“At and subsequent to the time of puberty,” he observes, “the enlarged ovaria are found to contain ova in different states of perfection; and in women who have never been impregnated, corpora lutea and cicatrices, which have been supposed previously to have contained ova, have been detected; whence it may be inferred that in them, not only the formation, but the extrusion of ova is accomplished.” Dr. Power says, there is a similarity between the secretion of the catamenia and the formation of the decidua after conception; and, under this view of the subject, he defined the efficient cause of menstruation to be, “An imperfect or disappointed action of the uterus in the formation of the membrana (decidua), which is requisite for its connexion with the impregnated ovum.”

The unimpregnated mammiferous ovum, as already stated, was not discovered till several years after this hypothesis was promulgated; and, if Graafian vesicles were ova, as Dr. Power erroneously supposed, he never proceeded to examine the ovaria during menstruation, to ascertain that these vesicles actually did escape from the ovaria periodically, or did burst, to allow ova to escape. In 1830 this conjecture, which had been propounded in 1821, had fallen into comparative oblivion, because it was not supported by such facts as are considered absolutely necessary to establish the truth, or make any view worthy of belief.

In accordance with Lord Bacon’s aphorism, “*Nil fingendum, nil excogitandum sed inveniendum, quod natura ferat aut faciat*,” I resolved to appeal to Nature and examine the ovaria during menstruation, which had never been done before. The first opportunity of doing so occurred on the 11th of March, 1831. It is necessary to be very particular about dates, for 1833 and 1839 continue to be held by some writers on this and on the other side of the Atlantic Ocean as simultaneous periods; nay, that 1839 preceded 1833 by six or more years.

To prevent any mistake, I will read the following dissections, from the “Cyclopædia of Practical Medicine,” vol. iii. page 236, published on the 1st of April, 1833:—

“On the 11th of March, 1831, I examined the body of a young woman, who died during menstruation from inflammation of the median basilic vein. The left ovary was larger than the right, and at one point a small circular opening, with thin irregular edges, was observed in the peritoneal coat, which led to a cavity of no great depth in the ovary. Around the opening, to an extent of three or four lines, the surface of the ovary was of a bright red colour, and considerably elevated above the surrounding part of the peritoneal coat. On cutting into the ovary, its substance around the opening and depression was vascular, and several Graafian vesicles of different sizes were observed. The right ovary was in the ordinary state. Both Fallopian tubes were extremely red and swollen, and their cavities were filled with menstrual blood. The lining membrane of the uterus was coated with the same fluid, and the parietes were soft and vascular. The size of the uterus was not increased.

“In the autumn of the same year, a woman under 20 years of age died suddenly from acute inflammation of the lungs while menstruating. The body was examined by Mr. John Prout (who died several years after at Aloupka, on the south

coast of the Crinea), and the uterine organs were brought to me for inspection. A red, soft, elevated portion of the right ovarium was also here observed, and at one part the peritoneal coat to a small extent had been removed. The edges of the opening were extremely thin and irregular, and in the substance of the ovarium, under the opening, was an enlarged Graafian vesicle, filled with transparent fluid. Numerous small blood-vessels were seen running along the peritoneal coat of the ovary to the opening. When the substance of the ovarium was laid open, several vesicles, of various sizes, and at different depths, were found imbedded in it. The left ovarium presented a natural appearance. The free extremities of the Fallopian tubes were gorged with blood; their cavities were filled with a red-coloured fluid. The uterus was not enlarged, but the parietes were gorged with blood, and the lining membrane of the fundus was coated with menstrual fluid. A small coagulum of blood likewise adhered to the upper part of the uterus.

"On the 2nd of April, 1832, Sir Astley Cooper, to whom I had mentioned these cases, sent me the ovarium of a woman who died from cholera while menstruating. The ovarium was much larger than natural, and at one point there was a small irregular aperture in its peritoneal coat, through which a portion of a slender coagulum of blood was suspended. On cutting into the substance of the ovarium, it was found to be occupied by three small cavities or cysts, one of which was filled with a clear ropy fluid, another with semifluid blood, and the third, which communicated with the opening in the opening in the peritoneal coat of the ovarium, with a firm coagulum.

"On the 18th of November, 1832, the uterine organs were removed by Messrs Girdwood and Webster from the body of a young woman, who had died suddenly the preceding day when the catamenia were flowing. Both ovaria were remarkably large, and both Fallopian tubes were red and turgid. The peritoneal coat of the left ovarium was perforated at that extremity which was nearest to the uterus by a circular opening, around which aperture, for several lines, the surface of the ovarium was elevated, and of a bright scarlet colour, like extravasated injection. The margin of the opening was thin and smooth, and did not appear to have been produced by laceration. Its centre was slightly depressed below the level of the edges, but there was scarcely the appearance of a cavity beneath. The right ovarium was much larger than the left, and, when cut into, a cavity or cyst was found, which was filled with half-coagulated blood. The peritoneal coat of this ovarium was entire.

"The uterus was large, and, when cut into, the parietes appeared to contain an unusual quantity of blood. The inner membrane was of a bright red colour, and coated with a thin layer of catamenial fluid. Both Fallopian tubes were red and turgid, and the interior of the left was filled with menstrual fluid, but nothing in the form of a Graafian vesicle could be detected in the tube. The appearances now described have been accurately represented in a drawing made from the parts within two hours after they came into the author's possession."

(The coloured drawing by Mr. Joseph Perry was here exhibited, with the date affixed to it.)

The human unimpregnated ovum had been detected within the Graafian vesicle several years before the time these observations were made, but I had not then succeeded in obtaining a sight of that body, and no anatomist in England, so far as I then knew, had succeeded in doing so, and its existence was almost wholly, if not entirely unknown. Under these circumstances to have asserted that ova escaping from the ovaria periodically was the cause of menstruation would (especially when the general belief still prevailed that the statements of De Graaf were erroneous) have been a conclusion unsupported by proofs. I was, therefore, led to draw the following inference, knowing well that if unimpregnated ova did exist in the Graafian vesicles, as described by Prevost, Dumas, and Baër, these bodies must escape with the bursting of the vesicles now described.

"The facts now related," I observed, "render it, however, extremely probable that all the phenomena of menstruation depend upon, or are connected with, some peculiar changes in the Graafian vesicles, in consequence of which an opening is formed in their peritoneal and proper coats; whether an entire vesicle, or only the fluid it contains, escapes through this opening, further investigation may hereafter determine."

In 1839, six years after the publication of the above cases, M. Gendrin related in his *Traité Philosophique de Médecine Pratique*, five cases in which he had examined the ovaria of women who had died during menstruation, and had observed the same appearances above described, but no reference was made by him to the observations previously published in the "Cyclopædia of Practical Medicine." In the first of the cases observed by M. Gendrin the left ovarium was vascular, and in the middle was an aperture, about a line in diameter, with an irregular margin. Its cavity would have contained a hemp-seed, its walls were red, and it was obviously a ruptured Graafian vesicle. The ovum was not said to have been seen. In his second case, a small, circular, ragged opening led to a cavity two lines in diameter, the walls of which were of a bright red colour. In the fourth, the right ovary had an aperture a line and a half in diameter leading to a small cavity with vascular walls. Although no ovum was seen by M. Gendrin in any of his cases either escaping from the Graafian vesicles, or in the Fallopian tubes or uterus, it was assumed as a fact that ova had escaped from the ovaria; and the general inference was drawn, that the escape of ova was the cause of menstruation. The statements were considered of the highest physiological importance, and termed the Ovular Theory of Menstruation. M. Negrier, of France, published about the same time a number of perfectly similar cases, to illustrate and support this theory, without having seen any ova; and other observers speedily followed with additional evidence; and it is now admitted that whenever an opportunity has occurred of examining the condition of the ovaria during menstruation, there has always been observed a point on the surface of one of the ovaria, which appears to have been opened or ruptured, and through which, it is presumed, an ovum had escaped.

In two instances the human unimpregnated ovum has actually been detected in the Fallopian tube; once by M. Hirtle, in 1843-4, and once by Dr. Letheby, of which there is an account recently published in the "Philosophical Transactions." During the rutting season, or during heat, M. Bischoff has repeatedly found the unimpregnated ovum in the Fallopian tubes of the lower animals.

Thus, by an appeal to nature, the veil has now been removed from one of her arcana, which a celebrated anatomist at the commencement of the present century affirmed had received no elucidation for thousands of years.

(To be continued.)

LECTURES ON GENERAL NATURAL HISTORY. BY THOMAS H. HUXLEY, F.R.S.

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and Fullerian Professor of Physiology, Royal Institution.

LECTURE XI.

(Concluded from page 508.)

Rathke's researches on the development of *Astacus*, as I have already pointed out, completely confirm the views as to the composition of the podophthalmian carapace, which have been deduced from its anatomical relations; and a careful study of the embryology of *Mysis* has shown me that in the lower, as well as in the higher *Podophthalmia*, the thoracic somites enter largely into the composition of this part. But the development of *Mysis* presents so many features of interest, that it may be worth while to describe it at some length.

The ova consist of a vitelline mass, inclosed within a delicate chorion. The blastoderm appears as an oval patch upon the surface of the yolk (A), thickest in the middle, and here presenting a more or less marked depression (c). It is sharply defined from the subjacent yolk (b), and consists of a finely granular mass, in which multitudes of endoplasts, about $\frac{1}{2000}$ to $\frac{1}{3000}$ ths of an inch in diameter, are imbedded.

The blastoderm next becomes larger at one end than at the other, and a median sinuation gradually divides this extremity

into two lobes, which will eventually form the anterior parietes of the head, and may be called the "procephalic" lobes (a).

FIG. 1.

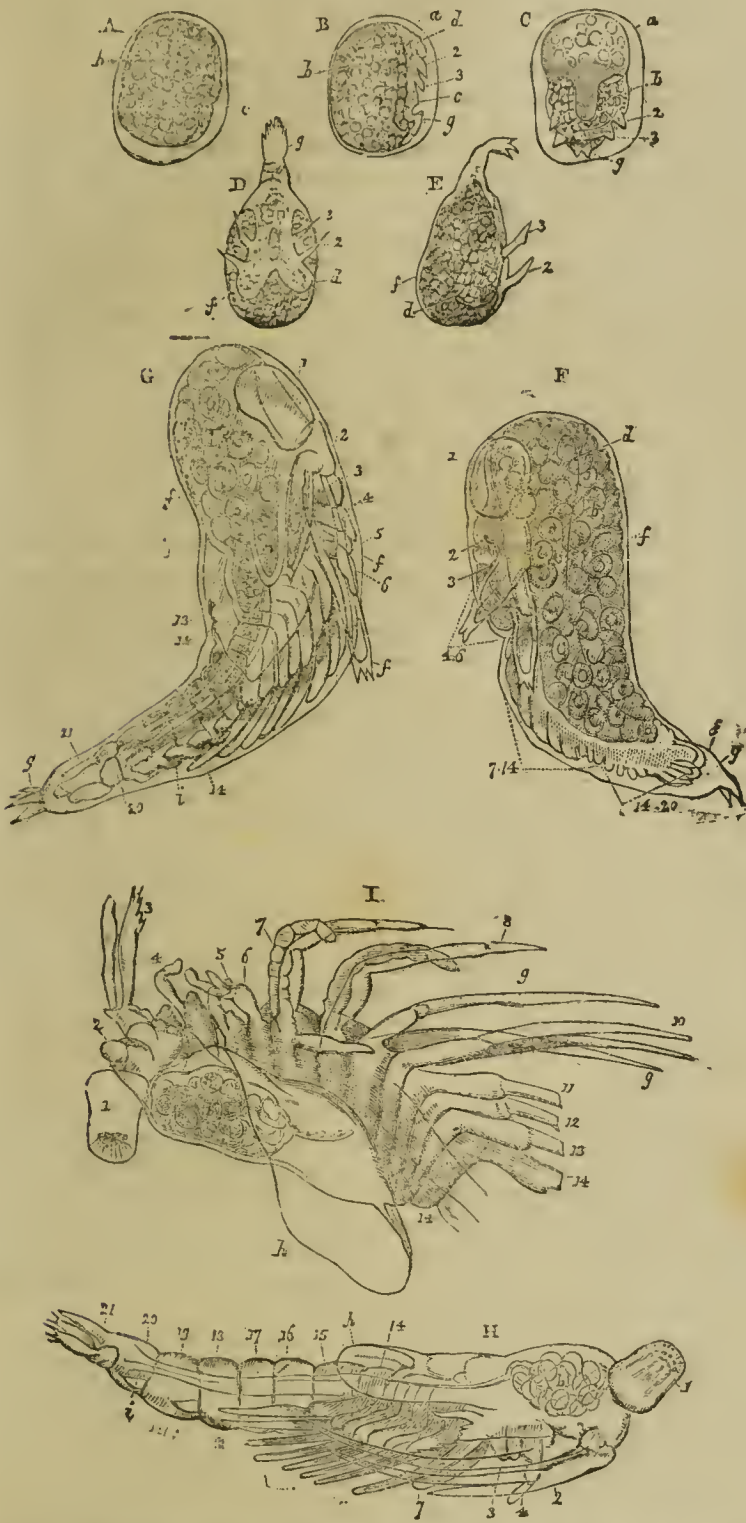


FIG. 1.—The development of *Mysis*. A. Side view of an egg, in which the blastoderm has just appeared. B. Side view further advanced. C. Front view of embryo at the same age, showing the procephalic lobes, here marked b. D. Larva, ventral view. E. Side view. F. Young pupa. G. Further advanced. H. Young *Mysis*, which has left its pupa skin. I. Anterior portion of the same, enlarged, and with the carapace thrown back. a. Vitelline membrane. b. Yolk. c. Central depression. d. Procephalic lobes. e. Larval integument. f. Its caudal enlargement. h. Carapace. 1, 2, 3, 4, etc. the somites and their appendages, numbered from before backwards.

(a) It is exceedingly interesting to remark the correspondence between the embryonic structure of the head of *Mysis* (and I may add that of other *Articulata*), and that of the head of a vertebrate embryo. The procephalic processes resemble in a remarkable manner the lateral cranial processes of the vertebrate embryo ("Balken des Schädels" of Rathke;) and the cephalic flexure of the Crustacean or Insect has its analogue, if not its homologue in the cranio-facial inflexion (Gesichts-Kopf-beuge, Reichert) of the higher *Vertebrata*. The subject of the relations between the articulate and vertebrate cranium, as demonstrated by development, is one of great interest, and will be discussed by and by. For the present I will only congratulate English naturalists on the appearance of Professor Goodsir's admirable essays on the Morphology of the *Vertebrata* (Edin. New Phil. Journal, January, 1857). The study of the composition of the Cranium has hitherto been pursued in this country seemingly on the principle that the skull is a child's puzzle, the pieces of which have to be got to fit somehow; but, hereafter, no one wholly ignorant of the researches of Rathke and Reichert, and of the value of development as a criterion of homology, will have any excuse for approaching the subject.

The median depression becomes more decided, and at the end opposite the procephalic lobes the blastoderm is produced into a sort of papilla, directed forwards. This is the rudiment of the caudal extremity. From the anterior part of the blastoderm there arise on each side two papillæ, whose points are directed backwards, the future antennules and antennæ. The whole of these parts are invested by a delicate structureless membrane, which gradually extends over and invests the whole yolk beneath the vitellary membrane. At the end of the caudal papilla it forms a broad process, produced into setæ, which sometimes appears fan-like, sometimes so deeply bifid as to resemble two styles.

The embryo has now reached what we may term its larval stage, and in this condition it leaves the vitellary membrane within which it was inclosed, and lies free in the ovigerous pouch of the parent. At the same time the caudal extremity enlarges, and straightens itself out, so that no indication of its previous inflexion against the thoracic portion of the blastoderm remains. The larva thus much resembles a pear (D, E), with four processes on one surface (2, 3), the antennulæ and antennæ, which have now become much elongated.

The young *Mysis* now grows rapidly and undergoes great changes in form; but it is a very remarkable fact, that the primitive integument remains unaltered; gradually enlarging, to accommodate itself to the increased size of the fœtus, indeed, but otherwise taking no share whatever in its changes. The young *Mysis* might, therefore, in this condition be justly termed a pupa, for the relation of the primitive integument to the animal which it incloses is precisely that of the pupa skin to the imago of an insect.

The antennulæ and antennæ remain intact within the sheaths afforded by the primitive integument, but, becoming immensely elongated and divided at their extremities, assume more and more their proper adult conformation.

In front of the antennules a large rounded protuberance makes its appearance from the procephalic lobes, and eventually becomes the ophthalmic peduncle. At first the sternal portions of the somites corresponding to these three pair of appendages occupy the same plane with one another and the postoral sterna (F G); but by degrees they become bent up (H), and at length the ophthalmic sternum occupies the upper and front part of the head (I). In this way the "cephalic flexure" is produced. The mouth is indicated behind the antennary sternum, which projects backwards in the middle line to form the labrum. On each side of it the rudiments of the mandibles appear, and behind these are the papillary commencements of the two pairs of maxillæ. Behind the second pair of maxillæ a distinct constriction indicates the commencement of the thorax, whose appendages appear at first as tubercular elevations, all of precisely the same character, and all directed backwards parallel with one another. The abdomen is at first very small, and the appendages of its sixth somite early acquire a far larger size than the others. The telson is developed from the middle line above the anus. While all these changes are going on, the blastoderm gradually extends over the tergal surface of the embryo and closes it in. When the carapace is first distinguishable it appears as a ridge arising from the sides of the posterior thoracic somites, beginning at the last but one, and gradually extending forwards as far as the antennary somites. The ridge increases and becomes a fold, which overhangs the bases of the thoracic appendages (G); and if this fold be turned back as in I, its actual attachments may be readily demonstrated.

Having advanced thus far in its development, the foetal *Mysis*, with all its organs fully formed, though somewhat different in appearance from those of the adult, casts its pupa-skin and straightens its body, which from having its posterior portion bent on the anterior, as in the embryo (H) had gradually in the pupa (F G) assumed the opposite curvature. Its dimensions are threefold those of the larva, and it exhibits vivacious movements when extracted from the pouch of the parent. It is not improbable it may yet undergo another change of integument before acquiring the full form of the adult.

Mysis then exhibits a true metamorphosis, the larva being like that of *Apus* provided with two pair of appendages, which are the antennules and antennæ; but the larva is inactive, and its changes are undergone within the incubating pouch of the parent.

In other *Podophthalmia*, the young leaves the egg as an

active larva, provided with several pair of well-developed appendages, by which it is vigorously propelled.

The occurrence of such a metamorphosis in many *Brachyura* and *Macrura*, originally indicated by Slabber was demonstrated by Dr. V. Thompson, but at first seemed improbable to many, and was disputed by Rathke, whose researches upon *Astacus* not unnaturally led him to doubt, on analogical grounds, the existence of metamorphosis in other *Podophthalmia*. Nevertheless Rathke himself, with characteristic truthfulness and candour, was one of the first to examine the matter fairly, and to publish his results, which were fully confirmatory of those of Thompson; and the precedent and subsequent observations of Du Cane, Philippi, Joly, Couch, and others, have now demonstrated the existence of a more or less complete metamorphosis in a great number of genera of *Brachyura*, *Anomura*, and *Macrura* (fig. 2). The successive

FIG. 2.

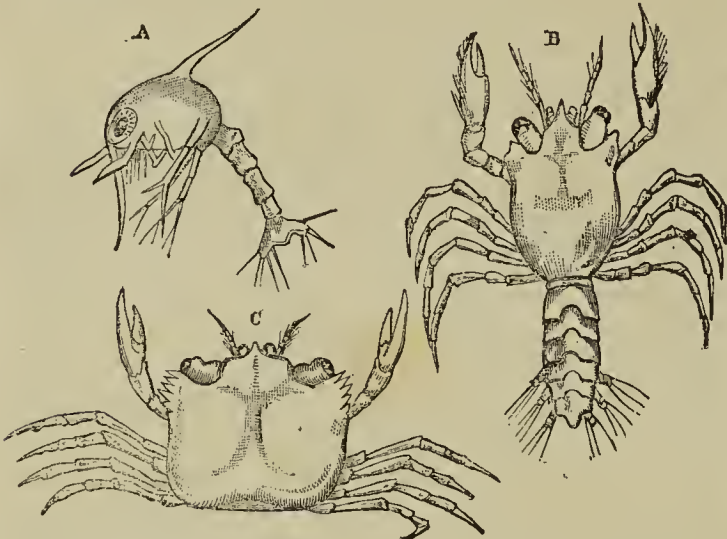


FIG. 2.—Development of *Carcinus maenas*. A. Zoea. B. Megalopa. C. Final State (after Couch).

stages are remarkably well exemplified by the young of the shore-crab (*Carcinus Maenas*) (A, B, C), which has been particularly studied by Mr. Couch. The larva, on leaving the egg, has sessile eyes, a long pointed rostrum, and a spine projecting from the middle of the carapace; rudimentary antennae, and two or three pairs of locomotive appendages,—the rudiments of the maxillipedes. The abdominal somites are without appendages, and the telson is broad and bilobed. Such larvae were once regarded as independent organisms, and received the name of *Zoea*. More recently, on the other hand, the converse error has been promulgated, that the *Diastylidae*, which in certain respects resemble *Zoea*, are larval forms.

The larva, casting its skin, next assumes the form represented in B, which at one time received the name of *Megalopa*, on account of the large, stalked eyes. In this state it presents many interesting relations with the *Anomura*, though we should hardly on such grounds be justified in regarding the *Anomura* as larvae. Finally, the carapace becomes broader, the abdomen loses its appendages, and is bent up under the thorax; the peculiarities of the facial region, characteristic of the *Brachyura*, are developed, the antennules and ambulatory members acquire their characteristic proportions, and the little Brachyuran by degrees assumes the special peculiarities of *Carcinus*.

ERRATUM.—P. 506, col. 2, line 16 from bottom, before "meropodite," insert "ischiopodite and."

ORIGINAL COMMUNICATIONS.

ON ABLATION OF THE CUBOID BONE IN ADULT TALIPES VARUS.

By BERNARD BRODHURST.

Assistant Surgeon to the Royal Orthopaedic Hospital, etc.

"A CASE of Double Talipes Varus, in which the cuboid bone was partially removed from the left foot," was lately brought before the Royal Medical and Chirurgical Society by Mr.

Solly. On this occasion I expressed an opinion adverse to the operation. Since the report of this meeting has appeared in the Medical periodicals, I have been asked many questions, and have received some letters, in reference to the subject of the removal of the cuboid bone; to all of which it has not been possible for me to reply so fully as I could have wished. With your permission, therefore, I will state the reasons why the cuboid bone should not be removed in talipes varus.

Removal of the cuboid bone has been suggested as a means to assist the reduction of distortion in the most severe forms of adult congenital varus. The operation has only once been performed; in this instance, namely, which was brought under the notice of the Medical and Chirurgical Society. And although ablation of the cuboid bone has been proposed for only a very limited class of cases, and those the cases in which the treatment is exceedingly difficult, the operation cannot be sanctioned; first, because the cuboid bone is not an obstacle to the removal of varus; and, secondly, because excision of this bone must give rise to deep-seated inflammation, and to partial destruction of the arch of the foot.

It is well known that in talipes varus the scaphoid bone becomes rotated, its inner edge upwards, and its upper surface outwards, or even downwards, and that it thus becomes wedged in between the astragalus, the cuneiform bones, the cuboid bone, and the inner malleolus; and in consequence of the rotation of the various tarsal bones which has been induced by the action of the tibial muscles and of the muscles of the calf of the leg, the cuboid bone becomes "as the keystone of the inverted arch," as has been well said by Dr. Little. Now if it were the intention of the Surgeon to unfold the arch thus formed, immediately, undoubtedly the cuboid bone would present so great an obstruction to forcible eversion as to resist whatever mechanical means might be applied without injury to the soft structures. Such, however, is not the mode of treatment which is adopted in these cases, as I have endeavoured to show in my treatise "On the Nature and Treatment of Clubfoot," p. 119, but rotation of the scaphoid bone is in the first instance to be overcome. This having been accomplished, the cuboid bone no longer presents itself as a serious obstacle to the restoration of the normal direction of the foot, but extension and abduction of the foot may be made effectively if it be not attempted to overcome distortion too hastily.

It is always difficult to overcome this rotation of the scaphoid; and, indeed, it may not be possible, even after the division of the tibial tendons, to depress the anterior portion of the foot inwards sufficiently to overcome rotation, without dividing some of the ligamentous structures on the inner side, and in the sole, of the foot. Especially the deltoid and the calcaneo-scaphoid ligaments may with advantage be divided in a rigidly distorted congenital adult varus.

The difficulty of overcoming rotation of the scaphoid bone appears to some to be so great as to be almost insuperable. The time which is occupied in achieving this object, however, is well spent; for, without it is accomplished, the inner edge of the foot can never be brought perfectly in contact with the ground; distortion can only in part be removed, and the act of walking must ever remain distressing, if not absolutely painful; but the scaphoid bone having been replaced, the remainder of the distortion is with less difficulty overcome, and the cuboid bone is no longer the obstacle to the removal of distortion that it appeared to be prior to the replacement of the scaphoid.

If it were true, that removal of the cuboid bone rendered this treatment of the scaphoid, which I have endeavoured to explain, unnecessary, it might be said that the time usually occupied in the treatment of these cases was, by means of this operation, materially shortened. Nothing of the sort, however, is pretended. It is not possible to adopt a substitute of any kind for this necessary replacement of the scaphoid bone, without which the limb must ever remain lame, and which having been accomplished, the cuboid bone is no longer a real obstacle to the complete eversion of the foot.

Enough has, perhaps, already been said without considering other reasons why the cuboid bone should not be removed; but that I may not appear to be writing factiously on this question, I may state further, that the cuboid bone cannot be removed from the tarsus without giving rise to deep-seated inflammation in the sole of the foot—inflammation involving the entire foot, which, if it occasion no other ill consequence,

must effectually prevent the application of mechanical means. Consequently, the position of the varus foot must remain as before the operation until inflammation has subsided. And when extension is recommenced, the structures to be acted on will lend themselves less easily than before to the extending process, and pressure on the integuments will be borne badly.

But a weighty argument yet remains to be urged against this operation. Removal of the cuboid bone must weaken the arch of the foot. This is a self-evident proposition, and one which should deter from the operation, even though this ablation were in itself useful in assisting to remove distortion (which I deny), for the arch of the foot would probably be less able to bear the superincumbent weight, than the foot was in its distorted, inverted condition.

Now, although excision of the cuboid bone may allow the foot to be somewhat straightened in the first instance, it does not remove the necessity of acting on the anterior portion of the foot to overcome the rotation of the scaphoid bone. But this rotation of the scaphoid bone having been overcome, the cuboid bone is no longer a serious obstacle to the eversion of the foot; consequently, ablation of the cuboid bone is unnecessary.

Again, inasmuch as removal of the cuboid from the tarsus cannot be effected without deep-seated inflammation being

occasioned, and without partial destruction of the arch of the foot, the operation is not alone unnecessary, but it is also pernicious.

NOTES ON THE USE OF GLYCERINE IN CONSUMPTION.

By RICHARD PAYNE COTTON, M.D.

Fellow of the Royal College of Physicians, London; Physician to the Hospital for Consumption and Diseases of the Chest, Brompton.

THERE is much difference of opinion as to the influence of glycerine upon cases of Consumption. Not a few Medical practitioners consider it scarcely, if at all, inferior to cod-liver oil, whilst there are not wanting those in whose hands it has entirely failed.

With a view of testing its effects, I administered it,—in doses varying from one to two, and occasionally three drachms, twice a-day,—to twenty-three of the in-patients of the Consumption Hospital; notes being carefully kept by the Resident Clinical Assistants, Dr. Stone and Dr. Sibbald. As the cases were not selected, and all of them were under the same dietetic and general hygienic conditions, the result, as exhibited in the following table, may, I think, be regarded as a fair illustration of its influence:—

No.	Sex.	Age.	Stage of Disease.	Complications.	Time under treatment	General effect.	Effect upon weight.	Average gain in weight per week.	REMARKS.
1	M.	41	2	—	4 weeks.	None.	Gain.	½ lb.	Had previously been improving under cod-liver oil.
2	M.	40	2	Emphysema	6 weeks.	None.	Loss.	—	Caused sickness. Patient improved and gained weight afterwards, under cod-liver oil.
3	M.	24	1	—	7 weeks.	None.	Loss.	—	—
4	M.	29	1	—	3 weeks.	None.	Loss.	—	Afterwards gained 1½ lb. per week under cod-liver oil.
5	M.	35	3	Bronchitis.	10 weeks.	Improvement.	Gain.	1 lb.	Took iodide of iron also.
6	M.	31	3	—	2 weeks.	None.	Loss.	—	An unpromising case, cod-liver oil having previously failed.
7	M.	30	3	—	2 weeks.	None.	Loss.	—	Ditto.
8	M.	16	2	Hæmoptysis	3 weeks.	None.	Gain.	¼ lb.	Caused sickness. Patient afterwards improved under cod liver oil.
9	M.	18	2	—	7 weeks.	Improvement.	Gain.	¾ lb.	—
10	M.	34	2	—	3 weeks.	None.	None.	—	Took steel with the glycerine.
11	M.	28	3	—	3 weeks.	None.	None.	—	Became dyspeptic. Patient afterwards improved under cod-liver oil.
12	M.	19	1	—	3 weeks.	None.	Loss.	—	Afterwards gained 3 lbs. in four weeks under cod-liver oil.
13	M.	13	3	—	2 weeks.	None.	Loss.	—	An unpromising case, other treatment having previously failed.
14	M.	19	1	Bronchitis.	2 weeks.	Improvement.	Gain.	1 lb. 4 oz.	Afterwards gained at increased rate under cod-liver oil.
15	F.	12	3	—	4 weeks.	Slight improvement.	Gain.	1 oz.	Health generally improved.
16	F.	46	3	—	4 weeks.	Became worse.	Loss.	—	An unpromising case, other treatment having previously failed.
17	F.	25	2	—	4 weeks.	None.	Loss.	—	Ditto.
18	F.	24	3	—	4 weeks.	Became worse.	Loss.	—	Ditto.
19	F.	29	1	—	4 weeks.	Slight improvement.	Gain.	4 oz.	Afterwards gained 2 lb. per week under cod-liver oil.
20	F.	30	2	—	2 weeks.	Died.	Loss.	—	Caused sickness and loss of appetite.
21	F.	38	2	—	3 weeks.	None.	Loss.	—	Ditto. Patient afterwards improved slightly under cod-liver oil.
22	F.	24	2	Diarrhœa.	2 weeks.	None.	Gain.	½ lb.	Afterwards gained more than 2lbs. per week under cod-liver oil.
23	F.	47	2	—	1 week.	Became worse.	Loss.	—	Caused gastric disturbance, thirst, and loss of appetite.

It will be observed that only in five cases was there any improvement; in all of which the weight was slightly increased. In two of these, however, a much greater advantage was subsequently gained under the use of cod-liver oil; the weight of one patient having increased as much as 2lbs. per week.

In seventeen cases either there was no appreciable improvement, or the patients became worse; and one, in an advanced stage of the disease, ended fatally. In nine of these cases more or less improvement occurred from the after use of the oleum aselli; in four instances, indeed (Nos. 4, 12, 19, 22), the gain in weight was very distinctly marked.

In five cases the glycerine either caused sickness, or otherwise disagreed with the stomach.

To any objection which may be raised that the glycerine was not given for a sufficiently long period, I would merely observe, that even in the cases where some improvement was noticeable, it appeared to me so probable that far greater good would accrue from the cod-liver oil, that I regarded a further trial of the other as unjustifiable; and, that such an anticipation was, in some instances at least, not ill founded, the table sufficiently demonstrates.

The following conclusions are, I think, irresistible, viz.:—

1. That glycerine has generally but little influence upon phthisical cases.

2. That, as a remedial agent in consumption, it will bear no comparison with cod-liver oil.

Clarges-street, Piccadilly, June, 1857.

STATISTICAL INQUIRY INTO THE EFFECTS OF CHLOROFORM.

By SAMUEL FENWICK, M.D.

Lecturer on Pathological Anatomy at the Newcastle College of Medicine, (in connexion with the University of Durham.)

(Continued from page 592.)

HERNIOTOMY.

THERE are only forty-five cases of this operation recorded, of which twenty-nine took place before the introduction of chloroform. Of these twenty-nine, one was dismissed as an out-patient with the wound unhealed, and eleven died; showing a mortality of thirty-eight per cent.; while since the use of anæsthetic agents, eight have perished out of sixteen, or fifty per cent. Whether the chloroform has had any effect in producing this increase of mortality, will be best ascertained by an examination of the following table. It shows the chances of death of each individual in the two series.

TABLE VII.

	First day.	Second day.	Third day.	Fourth day.	Fifth day.	Seventh day
Before chloroform..	1 in 5·8	1 in 12	1 in 7·7	1 in 18	..	..
Since chloroform..	1 in 4·0	1 in 12	1 in 11	..	1 in 10	1 in 9

We learn from this table that every death, both before and since the use of chloroform, has taken place within the first seven days. In the former series one in 5.8 sunk within twenty-four hours, in the second the cases seem to have been still more depressed, as four perished within twelve hours, and the only one that lingered till the seventh day died from gangrene of the wound. There have been, therefore, none of the secondary inflammations which chloroform is accused of producing, and it will add still further to our powers of appreciating the probabilities of their being so pro-

duced, if we first ascertain in what ratio pyæmia is likely to arise after this operation. I have collected detailed accounts of ninety-four post-mortem examinations of persons who died after herniotomy. The greater portion is taken from the reports in the *Medical Times and Gazette*, and these have, therefore, occurred since the general employment of chloroform, whilst others have been extracted from my own case-books. The following table, formed from these materials, sufficiently explains itself:—

TABLE VIII.

	Gangrene of gut.	Perforation of gut.	Peritonitis without disease of gut.	Stricture by bands of lymph.	Gangrene of scrotum.	Hæmorrhage.	Collapse.	Exhaustion from discharge.	Inflammation of brain.	Disease of lungs.	Abscess in pleura.	Diseased liver or kidneys.	Diseased colon.	Erysipelas.	Fever.	Cholera.	Totals.	Totals.
1st day after operation	2	8	3	..	..	1	4	..	..	..	..	1	..	..	..	..	..	..
2nd " " "	3	3	10	..	..	1	1	..	1	..	..	..	..	..	..	..	..	..
3rd " " "	5	1	2	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
4th " " "	3	4	3	..	1	..	..	..	..	..	..	..	..	..	..	..	58	..
4th to 7th " " "	3	1	7	..	..	..	..	1	..	2	..	..	..	1	..	..	15	..
7th to 14th " " "	1	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..
14th to 21st " " "	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Above the 21st " " "	1	1	..	1	..	..	..	1	..	..	1	..	..	..	..	..	8	81
No date given " " "	3	2	1	1	..	1	..	4	..	..	..	..	1	..	..	..	..	13
Total " " "	21	20	26	2	1	3	5	6	1	3	1	1	1	1	1	1	..	94

It will be remarked that, out of eighty-one cases in which the day of death is stated, fifty-eight took place within the first four days. Of this number it is perfectly evident that by far the largest part must have arisen from the disease, and not from the operation. Admitting that some cases of peritonitis were caused by the operation, the great number of deaths within the first two days sufficiently show that it usually commences before the use of the knife. Nearly the half of the whole number of deaths resulted from gangrene, or from perforation of the gut, accidents which must be allowed to have arisen in spite of, and not in consequence of any operative procedure. There are only eight deaths out of eighty-one after the termination of the first week; and in only one case, that of abscess of the pleura, is there the slightest ground for suspecting pyæmia; and in this case it is especially stated that the woman was broken down in health before the occurrence of the hernia. It is, I think, perfectly plain that, as far as the production of secondary disease is concerned, chloroform must be held blameless, and the theory which ascribes to it this effect is, in herniotomy at least, destitute of foundation.

But it may be fairly questioned whether chloroform does not produce injury when given in this operation. There can be no doubt that it depresses the action of the heart, and that its influence often continues for hours after its administration. Now in amputation or lithotomy this state of depression is so much less than that which arises from loss of blood or from protracted suffering, that we lessen the amount of shock by its use. But in hernia the pain is seldom severe, and still more rarely is there sufficient bleeding to depress the action of the heart. After amputation or lithotomy, a state of depression, if it only continue for a few hours, is of little consequence; but after the operation of hernia every moment is of value, and all the vital powers are required to enable the gut to recover from the serious injury it has suffered. On this account, therefore, and not from fear of its producing secondary diseases, I believe that the use of anæsthetic agents should be the exception, and not the rule, in this operation.

LIGATURE OF BLOOD-VESSELS.

In the following table I have contrasted the mortality of these operations before and after the use of chloroform.

TABLE IX.

	Before chloroform.			After chloroform.		
	Number of cases.	Deaths.	Mortality	Number of cases.	Deaths.	Mortality.
Carotid artery	1	1	100 per ct.	..	..	..
Brachial artery	5	1	20 per ct.	7	..	..
Ulnar	3	1	33 per ct.	9	..	..
Radial	5	1	20 per ct.			
External iliac	1	1	100 per ct.	..	..	..
Femoral	10	3	30 per ct.	..	..	..
Tibial .. ..	..	..	..	3	..	..
Totals	25	8	33 per ct.	19	..	..

We have no means of comparing the results of the operations upon the carotid, external iliac, and femoral vessels, as none of these have been tied since the use of anæsthetic agents. In the arteries of the arm, however, the advantage is decidedly in favour of chloroform; for out of five operations performed before its use, one died, and one required amputation, whilst none have perished out of seven who have undergone the same operation since. Two out of eight were lost in operations on the arteries of the fore-arm in the former period, but all have terminated successfully out of the nine cases which have taken place in the latter series. It must, however, be remembered that death seldom takes place from the operation itself; thus in the former series the case in which the carotid was ligatured died from the shock consequent on the removal of an immense tumour of the jaw; whilst that in which the radial was tied terminated fatally from tetanus, arising from the wound in the hand, the bleeding from which had necessitated the ligature of the vessel. It is, however, sufficiently clear that the mortality from these operations has not been increased since the use of chloroform by pyæmia.

AMPUTATIONS OF VARIOUS ORGANS.

This is an important class of diseases, not only on account of the frequency of the operations, but also on account of their being so often performed in private practice. Many

who would shrink from lithotomy, or the removal of a jaw, do not hesitate to amputate a breast, or excise a cancer of the lip. Table 10 is a comparison of the results of these operations before and since the use of chloroform.

TABLE X.

	Without chloroform.			With chloroform.		
	Number of cases.	Deaths.	Mortality.	Number of cases.	Deaths.	Mortality.
Removal of lip ..	31	1	3 per ct.	..	..	..
Amputation of penis ..	9	1	11 per ct.	6	..	..
Amputation of breast ..	40	4	10 per ct.	17	2	11 per ct.
Amputation of testis ..	21	3	14 per ct.	9	..	..
Amputation of rectum ..	2	1	50 per ct.	..	..	..
Total ..	72	9	12 per ct.	32	2	8 per ct.

If we take the total of these operations the advantage seems greatly in favour of chloroform. Out of seventy-two operations there were nine deaths, or twelve per cent. formerly, whilst only two out of thirty-two have died since its employment. I have omitted the number of cases of removal of the lip in the second series, but there is no case of death from this operation recorded. In amputation of the breast in the former period one died in the first week, one in the second week, one in the sixth, and one in the seventeenth week after the operation. Since the use of chloroform the date of death of only one is recorded, and that was on the eighth day, from erysipelas. As there is only one more death in this operation, we have no evidence that chloroform has acted at all injuriously by producing either pyæmia or other secondary diseases.

EXCISION OF JOINTS.

The following table shows the comparison of the results of this operation before and after the use of chloroform :—

TABLE XI.

	Without chloroform.			With chloroform.		
	Cases.	Deaths.	Mortality.	Cases.	Deaths.	Mortality.
Excision of elbow ..	10	3	30 per ct.	6	..	..
Excision of knee ..	..	..	..	2	..	..

It will be observed that there have been no fatal cases since the use of chloroform, although thirty per cent. died in the former period. Of the three deaths before the use of chloroform, two died in the second week, and one sank in the seventh week.

REMOVAL OF PARTS OF THE FOOT AND HAND.

These operations most frequently, when they terminate fatally, are cut off by phlebitis; it will be, therefore, necessary to examine whether there has been any excessive amount of this disorder. Before the employment of chloroform there are recorded 188 partial amputations of the hand or foot, including those of the phalanges, of which three died: whilst in the latter there have been twenty-four cases, exclusive of the phalanges, all of which have terminated favourably. As many of these were serious operations—such as the removal of the os calcis, and amputations through the middle of the foot—a tendency to pyæmia cannot have been great, or some would have been affected by it.

REMOVAL OF DISEASED BONES.

Operations upon bones are frequently followed by pyæmia, and it is, therefore, necessary to examine their results. Only 35 cases are recorded before the use of chloroform, and although none of these died, three required other operations. One after an operation on the ulna was attacked by inflammation, and required amputation of the arm; and in two persons in whom the tibia was trephined, inflammation attacked

the joint, and amputation of the thigh was performed. Since the employment of chloroform there have been 82 similar operations, of which only 1 has been fatal. If we suppose, therefore, that the operations in each series were of equal magnitude, there must have been less tendency to subsequent unhealthy inflammation in the latter than in the former period.

REMOVAL OF TUMOURS.

It is difficult to group together the irregular operations comprised under this head, as it is scarcely possible that the circumstances of those forming the two series will be similar. The danger, however, connected with the operation is usually dependent less upon the nature than upon the situation of the disease.

TABLE XII.

	Without chloroform.			With chloroform.		
	Cases.	Deaths.	Mortality.	Cases.	Deaths.	Mortality.
From scalp, face, lip, &c.	31	2	6 per ct.	18	2	11 per ct.
From groin, neck, axilla	23	3	13 per ct.	19	1	5 per ct.
From trunk and bones ..	59	6	10 per ct.	15	1	6 per ct.
Totals ..	113	11	9 per ct.	52	4	7 per ct.

Before chloroform there were 113 operations of this kind, of which 11 died, or 9 per cent.; while since its employment 4 have died out of 52, or 7 per cent. The advantage also is on the side of chloroform in the last two divisions, but against it in the first. Of the 4 who have died since the introduction of chloroform, 2 perished within the first 4 days; and the date of death of the others is not given. In the former series only 1 died within the first 4 days, five between the fourth and seventh day, and the remainder in the second week, with the exception of 1 death in the seventh week.

There has been an attempt to establish two propositions;—one, that the mortality after operations has increased since the use of chloroform; and the other, that this increase in the number of deaths is produced by pyæmia. We are now able to examine into the truth of these as regards this hospital, by means of the facts given in the foregoing pages.

With respect to the first proposition, we find that there has been a decrease in mortality since the introduction of chloroform in the following operations :—

	Per cent.
Pathological amputations of the thigh	5
Traumatic amputation of the thigh	17
Pathological amputation of the leg	8
Amputation at the shoulder joint	7
Traumatic amputation of the arm	5
Pathological amputation of the forearm	33
Traumatic amputation of the forearm	16
Ligature of the brachial artery	20
Ligature of the arteries of the forearm	25
Amputation of the penis	11
Amputation of the testis	14
Excision of the elbow	30
Tumours of axilla, etc.	8
Tumours of bones, etc.	4

There has been an increase in mortality in—

Traumatic amputation of the leg	5
Pathological amputation of the arm	41
Lithotomy	10
Herniotomy	12
Amputation of the breast	1
Tumours on head, etc.	5

There can be no doubt, therefore, that the first proposition is negated as far as regards this Hospital: and that, taken as a whole, the mortality after operations has greatly lessened since the introduction of anæsthetic agents.

With respect to the second proposition, as far as the few post-mortem records extend, the proportion of cases of pyæmia has not been increased; and between the fourth and twenty-first day after amputation of limbs the number of deaths has been less since than before the use of chloroform. In excision of joints there has been no loss of life from this cause, although such was the case in the former series. In

removal of diseased bones a smaller amount of secondary inflammation has occurred in the latter than in the former period. In partial amputation of the hand and foot no death has taken place. In operations on the breast the mortality has been only 1 per cent. higher, and in those upon the testis and penis no fatal case had occurred after chloroform.

With respect to lithotomy, it has been shown that only a very small proportion of deaths is due to pyæmia, and that there is no reason for believing that this disease has latterly increased. Of nearly a hundred deaths after herniotomy there was only one case at all resembling pyæmia, the greater number dying in the first few days after the operation from peritonitis, or gangrene of the gut. It is, therefore, clear that pyæmia has not been more prevalent in the Newcastle Infirmary since the use of chloroform; and it is probable that if the mortality in other Hospitals has increased, some other cause must have produced it.

But are we justified in attributing the increased success of the operations performed since the introduction of anæsthetic agents to their employment? I think not, for other circumstances which also influence the mortality of operations may have wholly or in part been the cause of the improvement; and the only way by which we can estimate the effect of one circumstance such as chloroform is by eliminating the effects of others. For instance, in lithotomy the average mortality of any large number of cases depends upon the concurrent effects of the age, sex, and general health of the patients, upon the size and nature of the calculi, on the condition of their urinary organs, on the method of the operations, and the amount of skill with which these are performed. Now if the amount of influence which each of these circumstances exercises should remain nearly the same, it is evident that the mortality of any large number of cases will be always similar, and the effects of any new circumstance may be readily found by comparing the cases which have taken place before and since its introduction. But we cannot employ this method in the investigation of the effects of surgical operations, for the amount of influence exercised by the various circumstances affecting their rate of mortality continually varies. Thus, as before seen, the proportion of deaths to cures in stone cases admitted into this Hospital had varied in four successive periods in the numbers 16, 27, 34, 21. From want of sufficient acquaintance with the cases recorded in the operation-books, I have been unable to group them so as to make those in each series comparable facts, and I must therefore leave it to future observations to prove whether the decrease in mortality since the use of chloroform is the result of its employment.

I have not introduced any comparison between smaller operations performed before and since the use of anæsthetic agents, because no deaths have taken place in either series. There can be no doubt, however, that if we had a sufficient number of cases the latter period would exhibit a greater mortality, inasmuch as almost all the deaths after chloroform have occurred during the performance of trivial surgical operations. As in the post-mortem examinations of these unfortunate cases it has generally been remarked that the right side of the heart has been gorged with blood, it may be surmised that the bleeding which usually accompanies the more severe operations tends to avert danger by preventing the heart being overloaded with blood. It seems to have been the invariable practice when symptoms of danger have appeared during the inhalation of chloroform, to confine the efforts for restoration to such means as would remove the superfluous vapour from the lungs. But if the right side of the heart be the part which first loses its irritability, the introduction of fresh air into the lungs seems an unlikely means to restore it. In addition to relieving the lungs of the poison I would suggest the opening of the jugular veins on the first appearance of dangerous symptoms, and if this should prove insufficient, the transfusion of healthy blood so as to stimulate the overloaded cavities of the heart to fresh exertions. Fortunately, the value of such suggestions can be tested upon animals, and whoever may show by experiment the best means of recovering persons suffering from an overdose of chloroform, will deserve the gratitude of the public and the Profession.

LOCK HOSPITAL.—The Governors of this Institution have determined to found a separate establishment for male patients in some central situation in London, and to devote the present building in the Harrow-road solely to the reception of female patients, infants and inmates of the Asylum.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

GUY'S HOSPITAL.

IDIOPATHIC TETANUS—TREATMENT BY QUININE. RECOVERY.

(Under the care of Dr. G. O. REES.)

THE following case presents us with an example of the form of tetanus which, in a majority of instances, results in recovery. A large body of evidence respecting the history, treatment, and termination, of this formidable disease, will be found by those interested in the subject in our Hospital Reports about three years ago. The results with regard to prognosis, to which after a somewhat detailed investigation of the question we arrived, were quite in harmony with the opinions generally entertained. They were to the effect, 1st, that idiopathic cases were out of all proportion less serious than traumatic ones; and 2ndly, that of the traumatic cases those were the least severe in which the interval between the injury and the first manifestation of symptoms was the longest. The following case was both idiopathic as to its causation, and chronic in the development of its symptoms, combining, in fact, the two elements upon which a favourable prognosis might be founded. It is in this class of cases, too, that the quinine and anti-periodic treatment is of so much use. The cases are certainly very rare, and although, as we have just said, the progress and events which it details were in strict conformity with rule, we trust that to some of our readers the subjoined narrative will not be devoid of interest and instruction:—

(Case reported by Mr. R. J. ROGERS.)

"John Brown, aged 23, by occupation a carman, living at Bermondsey, was admitted into Stephen Ward November 26, 1856, under Dr. Rees. He states that from his childhood he has enjoyed good health, and has always lived temperately. He has never had syphilis. His present illness commenced about nine days ago, when, without any particular cause, he was seized with great pain in the back and loins, extending down to the knee-joints, accompanied with much stiffness of the parts. The following day he noticed his lower jaw to become stiff and painful, so much so as to prevent him from opening it more than about an inch, and giving him much inconvenience in eating. About the same time both his eyelids dropped so as to almost close them. He cannot ascribe his illness to anything, but supposes he must have taken cold, though he has no recollection of having done so. He had been under medical care from the commencement to the present time, and (he says) was treated for rheumatism. There are no marks of injury anywhere about his person to account for the symptoms.

Present Condition.—He is a well-formed, and apparently healthy man. The eyelids are partially closed, as in ptosis; both pupils are very much dilated, and he has trismus. The recti muscles of the abdomen are exceedingly tense, and feel as hard as boards. He is unable to flex the thighs or bend the knees. There is slight opisthotonos. He says that any sudden noise causes his legs to twitch, otherwise they remain still. The bowels are regular; urine normal. Tongue much contracted, and protruded with difficulty; rather furred. Pulse 88, full, regular. Respiration and heart's action natural. Ordered—Enema terebinthinæ statim. R Quinæ disulph. ʒi., acidi sulphurici diluti, ʒi., aquæ distillatæ, ʒvj. Misc. sumat coch. i. mag. quartis horis. Middle diet. Port wine, ʒiv.

November 27th. The injection acted well yesterday; he slept well, and feels in rather less pain.

28th. Pupils not quite so dilated; tongue clean, still contracted; bowels open.

29th. About the same.

December 1st. Can open his mouth rather wider, but feels a twitching of the legs.

3rd. He is improving.

4th. The rigidity is rapidly disappearing, the abdominal muscles are less tense. Repetatur mistura ter die sumend.

6th. Better in every way; to have full diet and one pint of porter.

8th. Much better; there appears nothing now but the dropping of the eyelids. Ordered emplastrum lyttæ nuchæ.

10th. Good vesication produced by the blister; can open the eyelids rather better.

11th. Improving. He walks about the ward now, and complains of nothing.

15th. Will leave the hospital in a few days."

Dr. Rees informs us that shortly after the last note of the clinical clerk the man left the hospital, and in every respect quite well.

HOSPITAL NOTES.

STRUMOUS (?) CORNEITIS.

Mr. Critchett has devoted a very instructive portion of one of his excellent Clinical Lectures on Diseases of the Eye, to the attempt to show that what is known as "strumous corneitis" is a disease of the causes of which we know very little, and over the progress of which no remedies have yet been proved to possess any power. We speak of that form of chronic corneitis which occurs about the age of puberty, or from 20 to 35, and in which the whole cornea assumes a condition resembling ground glass. It usually affects first one eye, and then, after a month or two, the other also, and is never attended by ulceration. Mr. Critchett's statement is, that he has fairly tried all the vaunted remedies—mercurials, iodides, tonics, counter-irritants, &c., and has arrived at the conclusion that the disease is one which runs its own course despite of treatment, and in which, consequently, active meddling is worse than useless. The cheering part of the story is that its natural termination, even under circumstances the least promising, is always in complete recovery. The disease is a very well marked one, and very distinct from the common forms of ophthalmia. It is a rare affection, but the large field of observation afforded by the Moorfields Ophthalmic Hospital brings not a few examples of it under notice. One of such, of unusual interest, is now attending. Mary Ann H., aged 18, stout and florid, and not presenting any specific indications of struma. She was admitted in February of the present year with double corneitis. The right eye had been first affected about nine weeks before, and in spite of the treatment adopted by the medical man, under whose care she had been, the disease had steadily advanced, and two weeks ago had attacked the left. The right cornea was so opaque that she could only just distinguish light from darkness; it was slightly conical in the centre, and presented, from lymph effused behind it, a peculiar pink appearance. The left was in a similar but less advanced condition, and in both there was considerable sclerotic congestion. Menstruation was regular, and excepting a feeble circulation no indication of cachexia existed. Mr. Critchett ordered the Griffiths's mixture in ounce doses three times daily. The girl has attended regularly from that time to the present. At first the disease progressed steadily. For three months the patient was totally blind except to the perception of light, and so hopeless was the aspect of things, that Mr. Critchett several times remarked to his class that it was the most severe case of corneitis he had ever seen, and that he feared it would constitute an exception to the rule he had endeavoured to establish, that the disease was always recovered from. Ultimately, however, the case has falsified the fears entertained, and conformed itself to the rule referred to. The same tonic treatment has been continued throughout; and during the last six weeks so much improvement has taken place, that there is now every reason to expect that both corneæ will eventually clear.

ULTIMATE ILL RESULTS OF THE DEPRESSION OF CATARACT.

An instructive case has recently been under Mr. Bowman's care in the Moorfields Ophthalmic Hospital, in which depression had been practised with perfect success, and after nearly two years of good sight the eye had been lost by inflammation. The particulars are briefly as follow:—George H., now aged 62, came up from the country to be under Mr. Bowman's treatment for cataract, in May, 1854. The cataract was most advanced in the left eye, in which it had existed for about eighteen months. He was blind of the left, and the right was becoming inconveniently misty. Mr. Bowman (who was then performing depression in a number of cases, with the view of testing the value of this operation as compared with extraction) depressed the lens in the left eye, and with perfect success. The man soon after returned home, and for more than

two years enjoyed sight, which enabled him to read the smallest print, and had no pain whatever in the eyeball. In July, 1856, he was suddenly attacked by severe pain in the globe, for which he could assign no cause. He describes the illness as having been attended by much pain and feverishness, and within a week of its commencement had lost his sight. After a time the pain subsided to a great extent, but he remained without any vision whatever in the affected eye. In the mean time the cataract in the right eye had so much increased that he could make but little use of it. In May of the present year, therefore, he came in order to have a second operation performed. The lost eye was constantly fretful and painful, and the lashes of the lower lid were turned against it. Before proceeding to extract, Mr. Bowman first performed the usual operation for entropion, and also determined to remove the lost globe, fearing that it might prove a source of irritation to the other. This was accordingly done, and an opportunity thus occurred of examining the state of the organ. The nucleus of the depressed lens was found still existing, and although dense and shrivelled was not actually cretaceous. The choroid and retina had been separated by effusion between their layers. Last week Mr. Bowman extracted the lens from the right eye, and when the eye was opened, a day or two since, the section was found united, with a central clear pupil. The man has been wearing an artificial eye, with perfect comfort, from the fifth day after the excision. The readers of our notes will be aware that the operation by depression is one which is now never performed at the Moorfields Hospital. It has been wholly discarded on account of the frequency of such occurrences as the above case illustrates, viz., that the nucleus of the lens is liable at any subsequent period to become a source of irritation, and excite inflammation, which will end in amaurosis. Although so much easier of performance, and so tempting on account of its little risk and the speed with which good vision is obtained, it is, therefore, in the long run a much less satisfactory procedure than extraction. We might add that the operation by solution, when the lens is hard, is liable to nearly the same objection. The outer parts of the lens only are really absorbed, and after a succession of troublesome operations the nucleus at last drops out of the axis of vision, and a condition of things very similar to that obtained by depression exists, and one which is liable to the same subsequent risks. On this important subject the reader will find some very excellent remarks in Mr. Dixon's recently published book, p. 310, *et seq.*

CASES OF BRONZED SKIN, ETC.

The case of bronzed skin which we mentioned some months ago as under care in Guy's Hospital still remains under observation. The woman has at times appeared to improve somewhat in health, and at others has relapsed. Dr. Addison mentioned the other day that he was attending in private a young lady in whom the bronzing and the concomitant constitutional symptoms are exceedingly well marked. A man recently died under Dr. G. O. Rees' care in Guy's, in whom no bronzing whatever existed beyond a slightly more than usual swarthy hue of the parts exposed to the air. He had, however, all the symptoms of the supra-renal cachexia, and died of sheer exhaustion. After death both the capsules were found much enlarged, and totally disorganised by fibroid degeneration. There was no cretaceous matter in them, and therefore it might be inferred that the condition had not existed for very long prior to death. There seems every reason for holding that bronzing of the skin is a symptom consequent on renal-capsular disorganisation, and requiring in the majority of cases a considerable period, say six or twelve months, for its development. Cases in which the capsules are found destroyed by diseases which have probably been rapid in their progress, do not, therefore, constitute exceptions to Dr. Addison's views, even should no change in the colour of the skin have been noticed. It is important to note that the character of the constitutional symptoms is the same, whether the bronzing have had time to occur or not.

EXCISION OF TWO-THIRDS OF THE TONGUE—RECOVERY, WITH FAIR POWER OF SPEECH.

The man to whose case we adverted a few weeks ago as under Mr. Simon's care in St. Thomas's, and from whom the anterior two-thirds of the tongue had been removed on account of cancer, has since left the Hospital. The wound had soundly healed, and considering the large size of the

portion removed, the facility with which he could eat and speak were, we are assured, astonishing. The gland under the jaw, which was enlarged at the time of the operation, has not at all increased since. Of course the recovery must be regarded only as a temporary one; but the riddance of so painful and distressing an affection as ulcerated cancer of the tongue, even for a time only, is an end well worth gaining, even at some little risk.

EXTREME DISCOLORATION FROM THE NITRATE OF SILVER—EPILEPSY, ETC.

A man who has, we dare say, come under the notice of not a few both of our London, Parisian, and American readers, presented himself at St. Thomas's the other day. The most striking feature in his case is, that he is coloured in all parts of dark slate colour by the nitrate of silver. The coloration affects the mucous membrane as well as the skin, and is far darker than we ever before saw it. He states that he took a long course of nitrate of silver about sixteen years ago for the cure of epilepsy, became discoloured, and has remained so without change ever since. He is an American, and under the name of the "blue man" has excited much attention in that country. His object in coming over to Europe is in the hope of obtaining successful advice against his epilepsy, which still torments him. About six months ago he was under M. Trousseau's care in the Hôtel-Dieu, and took without advantage a long course of belladonna, a very favourite remedy in epilepsy with that Physician. In London he has seen Dr. Marshall Hall, who has advised tracheotomy; but as yet no Surgeon has been willing to perform it. The man himself entertains a rooted conviction that the epilepsy is connected with sexual causes, and is very desirous to have his testes removed. He states that this procedure has actually been adopted in several similar cases in Georgia, and with complete success. No English or Parisian Surgeon has been willing as yet to accede to his wish in this matter. In the first place, the diagnosis of a sexual cause is not at all clear. The fits began at the age of 8, and at present occur almost daily. Mr. Arnott, who saw him with Mr. Simon at St. Thomas's, suggested the use of the bromide of potassium, which has recently been so highly commended by Sir Charles Locock for epilepsy depending upon sexual causes in the other sex. A trial of it is, we believe, to be made.

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Medical Times & Gazette.

SATURDAY, JUNE 27.

MEDICAL REFORM A PUBLIC QUESTION.

NEXT Wednesday two Medical Reform Bills will be brought before the Commons of England. One Bill emanates from the Medical Corporations, and will be opposed by some of the Universities. The other Bill, favoured by the Universities, will be opposed by the Corporations. The most probable result will be that the Government and members of the House of Commons will say, "Oh! this is a Medical question, and Medical men themselves cannot agree upon it; we don't understand it, and have not time to study it. Better wait till the Doctors make up their minds about it. Let the matter stand over for next session." This is the old story. Year

after year the conflicting interests of different sections of the Profession have defeated one Medical Reform Bill after another; and so it must be until Medical Reform is regarded more as a Public than as a Professional question.

Medical Reform to many minds only signifies such an alteration in our Corporations as would give the members of those Corporations some power to manage their own affairs. If this limited signification were correct, the Government might say without impropriety, "Agree among yourselves, gentlemen, and when you are unanimous I will do what you wish;" but Medical Reform in its true signification is a very different question. It requires very little argument to show that it is a question which should be settled by the Legislature in a public, not in a class spirit. The public interest of the community, and the private interest of every individual, are concerned in the settlement. Some 400,000 persons die annually in England alone, and it is not only those in their *last* illness, but as all through their whole life are liable to suffer from accident or disease, all are interested in the character and ability of their Medical attendants. The State holds Medical and Surgical treatment to be so important that it compels every Union in the kingdom to supply the poor with it gratuitously. The poor rates are lowered by shortening the illness of the pauper. The bills of mortality are reduced, and the average of human life is prolonged, by the efforts of Medical men to prevent, alleviate, or cure disease. The public are not competent to judge of Professional merit; and it is the duty of the State to secure to the public a sufficient supply of well-qualified Medical men, and to prevent those qualified from being confounded with the unqualified. This is the duty the State owes to the public, and it should be performed totally irrespective of comparatively insignificant and conflicting class interests.

Here, then, is the real point at issue, the material difference which the public and the Profession should consider well before asking for parliamentary support in favour of either Bill: Would the public be as well supplied with properly educated Medical men under both Bills? Would the system of registration under either Bill be sufficient to enable the public to distinguish between legal and illegal Practitioners? These are the questions in which the public are especially interested. This is the public view of the question.

Now, by both the Bills before Parliament preliminary education is insisted on, uniformity of Professional qualification is provided for, a system of compulsory registration is established,—and all this is carried out under the direction of a general Medical Council. The constitution of this Council is one great stumbling-block in the way of those who seek to unite the supporters of both Bills. According to Lord Elcho's Bill the Council would consist of thirteen members, namely, the President of the Board of Health, and twelve other persons nominated by the Government, nine of whom must be qualified members of the Medical Profession. It is here that Lord Elcho's Bill meets with the most decided opposition. There has been a strong feeling in favour of representative government in the Profession, and an equally strong objection to submit to the direct control of the State; and those who entertain these feelings and objections prefer very decidedly the Council according to Headlam, in which there would be twenty-three members, of whom six only would be nominated by the Crown, and the other seventeen by the different Universities and Corporations. But Lord Elcho and his party say this Council is an impracticable collection of the representatives of opposed interests, and is neither responsible to the general body of the Profession nor to Parliament, and would be more likely to represent the spirit of monopoly and exclusiveness characteristic of the *councils* of the Corporations than the feelings or interests of the Profession at large. On the whole, we are inclined to think that, if some provision

were made in Lord Elcho's Bill that the nine Medical members of his Council should be selected from the different orders of the Profession, his Council would be a much better one than Mr. Headlam's, more likely to work well, more economical, and more directly responsible to the whole Profession through Parliament. Indeed, both the Colleges of Physicians and Surgeons, so lately as last year, were in favour of a Government Council, and it is only this year that they prefer electing one themselves.

Were this the only question at issue, however, we should not be without hope of seeing a compromise effected. The real battle-field is not so much a public as a professional question, namely, the right of University graduates to practise without the licence of the Colleges. If Mr. Headlam's Bill were to pass, the degree of M.D. would be a mere honorary distinction. No doctor of medicine could practise as a Physician without a licence from one of the Colleges of Physicians, —no University surgical degree could entitle a Surgeon to practice without a license from a College of Surgeons. On the other hand, were Lord Elcho's Bill to pass, the licence of the Colleges would be the mere honorary distinction, and every one who entered the profession would procure his right to practise by passing an examination fixed at a certain *minimum* standard by the General Council. There would be this one gate through which every one must enter the profession, subsequent connexion with any of the Colleges being perfectly optional. Hence the opposition of the Corporations to Lord Elcho's Bill, and its support by the Universities. The charters, the exclusive privileges, would become worthless, and there would be a free and open competition between the Universities and Colleges for members. No one would be compelled to join any College, and the fear is that the Colleges, which have done so much for Medical service, would be ruined. To this the reply is made, that where *many* seek some honorary distinction, in addition to the compulsory legal qualification, *nearly all* would do so, in order to stand on an equal footing before the public. At present, no one is *compelled* to join the English College of Surgeons, yet *all* English Surgeons do so as a matter of course, although the licence of the Apothecaries' Company is their only qualification to practise.

Here, then, is the rock on which Medical Reform will, in all probability, be wrecked next Wednesday, as it has been wrecked so often before. Whatever view the Profession may take of the two Bills, the House of Commons will never pass a measure suspected of monopoly or exclusiveness; and the Government does not care enough about the matter to pass a more liberal measure strongly opposed by vested or class interests.

THE WEEK.

Mr. GRIFFIN has again memorialized the Poor-law Board on the grievances of the Poor-law Medical officers, and he has caused a copy of the Memorial to be transmitted to the Members of the House of Commons. We are most happy also to observe that Petitions have been presented on the same subject by the President and Council of the Royal College of Surgeons of England, and by the Master and Wardens of the London Society of Apothecaries; and that both of these corporate bodies represent to the Legislature in the strongest terms the injustice which is now exercised by the Poor-law Board and the local Boards of Guardians, against a large number of the General Practitioners of this country. The College of Surgeons condemns the existing system of permitting Practitioners possessing only one qualification to hold Poor-law appointments, and considers that such a step (which is allowed only because the smallness of the present remuneration prevents fully qualified gentlemen from accepting the

offices) is alike injurious to the poor and the Profession. The authorities of the Society of Apothecaries represent to the House of Commons that the amount of money paid to the Poor-law Medical officers is, in a large proportion of cases, so small as to be wholly inadequate as a Professional remuneration, and probably barely sufficient to defray the cost of the medicines supplied. In Mr. Griffin's Memorial to the Poor-law Board, that gentleman points out the inadequate nature of some recent instructions issued to the local Guardians on the subject of the Medical officers. In a very able analysis of these instructions, and a comparison of their nature and objects with those of other documents emanating from the Board at Whitehall, the writer shows that the Union Medical officers have no particular cause for gratitude on account of this apparent movement on their behalf. In the first place, the order is prospective, and not retrospective, and does not, therefore, confer any benefit upon the present officers, but the reverse, as it implies that they are not permanently elected at present; whereas, by an order issued in February, 1855, it was then stated that the appointments in question should thenceforth be made for life. If that order were valid, as Mr. Griffin justly remarks, there is no need of fresh legislation on that subject; and if, on the contrary, there be any doubt of its validity, a clause might have been introduced in the present order, making the existing officers permanent in their appointments,—a step of mere common justice, and one which would have removed all ambiguity. Again, the new order enforces residence in the district as a claim for permanency of office; and it would really appear that this clause was directed especially to exclude Mr. Griffin from his appointment; for it seems that he resides out of the district to which he is appointed, although his furthest patient is not a mile from his residence. On the other hand, one of Mr. Griffin's colleagues is permanently appointed simply because he resides in his district, although he has patients nine miles from his residence. Out of five hundred Medical officers who have sent in returns, one hundred and forty-six are residing out of their district, although some are only living on the other side of the street, and others at equally small distances; yet all these gentlemen would be deprived of their appointments by the recent order. Inadequate as these recent regulations appear to be to meet the wants of the case, Mr. Griffin alludes also to the still more important points which, although taken into consideration by the House of Commons in 1854, have as yet received no attention from the Poor-law Board. The question of the salaries of the Medical officers is as yet quite untouched; although it has been proved on repeated occasions both that the payment is inadequate generally, and that the rate of payment in different Unions and in different parts of the same Union, is altogether disproportionate to the duties performed, and to the area included in the districts.

At a bankruptcy meeting a few days ago a wine merchant in Piccadilly was proved to owe "Mr. Robins, Surgeon and Apothecary," *four hundred pounds* as the *balance* of an account for medicines and Medical attendance during the last seven years; the bankrupt having paid about fifty pounds a year during this period on account. About three-fifths of the medicine was for the bankrupt himself. No wonder homœopathy still exists.

On another page of this day's journal will be found an appeal, to which we earnestly beg to call attention, on behalf of a deeply afflicted, but most worthy member of the Profession. The public services of the founder of the Epidemiological Society, not less than his private worth and unostentatious charity to the poor, present prominent claims on the public

as well as on the Profession. We are sorry to learn that to physical and mental depression, apparently hopeless in character, is added extreme poverty and threatened want. The Profession has of late been conspicuous in its brotherly kindness to its own unfortunate members, and we trust that such a man as Mr. Tucker will not be allowed to be neglected in his distress.

The Medical men of Southampton should be heard as to the salubrity of the soil of Netley Hospital. Twenty-eight of these gentlemen have signed an address, in which they express their "deliberate conviction," their "firm and unanimous opinion," that the site of the Hospital has been wisely selected. It is surely very hard upon twenty-eight gentlemen to say that their opinion is biased by interested motives or local influences.—At a public meeting of the Medical Profession at Southampton last week, attended by forty Physicians of the town and neighbourhood, Dr. Oke described the site selected for the Hospital as "magnificent," and stated that in thirty years' practice he had only seen one case of ague. Dr. Osborn said, that in the district immediately around Netley, during the last twenty years, in a population increased from 2716 to 3166, there had only been twenty-two deaths from fever, averaging 1.1 case per annum. Dr. Joseph Bullar had only seen one case of ague in twenty years' Dispensary practice. Other gentlemen confirmed these statements, and the following resolution was carried unanimously:—

"That the individual experience of the members of the Profession practising in and around Southampton is not only completely subversive of the statement that it is a district peculiarly liable to ague and fever, but tends in the strongest manner to show its almost complete exemption from the former disease and the comparative unfrequency of the latter, a conclusion fully confirmed by the annual register of sickness and mortality among the poorer classes in the parishes of St. Mary's Extra, Bursledon, Hamble, and Hound, the latter being the parish in which the new Hospital is situated."

An extract from a report by Mr. Cooper, the Officer of Health of Southampton, will be found in another column, which completely bears out all that we have said as to the absurdity of the objections raised to the site selected for the Hospital.

The Committee of the Lords meet to receive evidence on the Sale of Poisons Bill; but as it is a Special Committee nothing is allowed to transpire until they have made a report. The chemists and druggists, or rather the "druggists," for very few of them are chemists, are getting up a strong opposition not merely to this, but to any measure which shall restrict them in any way whatever. They will consent to a Bill which will be inoperative, or to one in which one-half of the clauses neutralize the other half. Those among them who do not sell arsenic by retail, have no objection to an arsenic restriction act to limit others in their power of selling it.

It is high time that the 44th clause in the Act for the Suppression of Nuisances should be modified. Antimony smelting, near Kennington-common, has been shown to be an intolerable nuisance in the neighbourhood. Dr. Odling, the Medical Officer of Health for Lambeth, has deposed that the effluvia from the smelting are "decidedly dangerous to health." Dr. Pursell said he quite agreed in opinion with Dr. Odling that the manufactory was a very great nuisance, and highly injurious to the health of the inhabitants. For his own part, he could say that he suffered very severely from it. His house was frequently filled with a vapour which perfectly poisoned it, and when it disappeared it seemed to have left behind on the walls a portion of its noxious gas, which lasted

for days. One night in particular, the nuisance was so great that he (Dr. Pursell) coughed incessantly. The injurious effect of the gases emitted from the defendants' premises was most perceptible in his (Dr. Pursell's) garden. There the colour of the grass, the trees, and shrubs was completely changed, and vegetable life seemed destroyed. That morning he had called the attention of Dr. Odling to the gooseberries and currants growing in his garden, and showed him that they were so injured as to be perfectly destroyed and dropping off. Serious complaints had been made to him by many of his patients of the nuisance, and its pernicious effect on them; and he perfectly agreed with the officer of health for the parish that such a nuisance should not be permitted to exist in such a neighbourhood. All this was confirmed by other witnesses; yet the 44th clause of the Act may lead to great difficulty in suppressing the nuisance. The clause is worded thus:—"And the provisions of the Act shall not extend or be construed to extend to mines of different descriptions, so as to interfere with or obstruct the efficient working of the same, or to the smelting of ores and minerals, or to the manufacturing of the produce of such ores and minerals." Surely something should be added to prohibit the working of mines or smelting of ores in densely populated districts.

The Reports of the Board of Health have been, for the most part, so very discreditable to their authors—so unfair, so one-sided, and sometimes so dishonest—that we are more than commonly glad to welcome one of a very different character. Mr. Simon's letter and papers on the History and Practice of Vaccination, which appeared this week as a blue-book, afford such complete and conclusive proof of the benefits which have resulted from Jenner's great discovery, in so able and interesting a manner, that Medical literature has been really enriched; and we may trust that the Report will lead to more perfect provision for general public vaccination in Great Britain. Parents must not be permitted to expose their infants to a dangerous and fatal disease. This "liberty of omissions infanticide" must be checked. The law of 1853 must be enforced. Progressive diminution of small-pox has followed successive improvements of the law. The annual rate of deaths from small-pox in England and Wales per million of the population from 1838 to 1841 averaged 770, from 1841 to 1853 they fell to 304, in 1854 they were 149, and in 1855 only 132; the last two years showing the smaller mortality attending the law of compulsory vaccination. The law must be still further improved. It must be rendered stringent and workable, and the country of Jenner will at last reap the full benefit of his labours.

REVIEWS.

On Diseases of the Liver. By GEORGE BUDD, M.D., F.R.S., Professor of Medicine in King's College, London. Third Edition, pp. 496. London: 1857.

Dr. Budd's *Treatise on Diseases of the Liver* is now a standard work in Medical literature, and during the intervals which have elapsed between the successive editions, the author has incorporated into the text the most striking novelties which have characterised the recent progress of hepatic physiology and pathology; so that although the size of the book is not perceptibly changed, the history of liver diseases is made more complete, and is kept upon a level with the progress of modern science.

Among the more important researches of late years have been those of Lehmann and Bernard upon the chemical and microscopical appearances of the blood as it passes through the liver; but as these investigations have been repeatedly noticed in our pages, it is unnecessary to do more than to state that the reader will find them summed up with great

care and perspicuity in the early part of Dr. Budd's work. Next, a most important novelty described by Dr. Budd, is the relation recently found to exist between hydatid tumours and other forms of cystic entozoa on the one hand, and tapeworm on the other. Küchenmeister caused dogs to eat fresh and living cysticerci, and found, upon examination, that in the intestines of these quadrupeds, the cystoid worms were converted into tapeworms. Siebold also found that the cysticercus pisi-formis, which is common in the liver and mesentery of the hare and rabbit, the cysticercus tenuicollis, common in the mesentery of sheep and oxen, the cysticercus cellulose, often found in great numbers in pork, and the cœnurus cerebri—are all developed in the intestine of the dog into a long tapeworm, the tænia serrata of the dog; which Siebold considers to be identical with the tænia solium of man, and also with the tænia marginata of the wolf, the tænia crassipes of the fox, and the tænia intermedia of the polecat, all these being varieties of the same worm. By killing dogs at different intervals after they had swallowed the cystoid worms, Siebold was able to trace their metamorphosis into tapeworms; and since the publication of his researches on the production of tapeworms from the various cystoid worms, the converse experiment has been performed, and cyst worms have been produced from the eggs of the tapeworm. In one of these experiments, M. Haubner, a Professor in the Veterinary College at Dresden, gave joints of the tapeworm of the dog, containing fully-developed eggs, to several lambs, and in the course of a fortnight all these lambs had the staggers, while other lambs in the same fold remained in good health. The staggering lambs were killed after different intervals, and in their brains and other parts of their bodies, cystoid worms were found in different stages of development. In another experiment, made by Professor Leuckart, of Giessen, mice were made to eat ripe joints of the tænia crassicollis of the cat, and the result was the development of cysticercus fasciolaris in the livers of the mice. Another point briefly alluded to, but not at present confirmed by Dr. Budd, is the late announcement by Virchow, that the "scrofulous enlargement" described by Dr. Budd, gives with a solution of iodine the chemical reaction of starch, like the so-called amyloid bodies occasionally found in the brain, a circumstance which has led Virchow to propose the name of amyloid degeneration to this condition of the liver.

Cirrhosis of the liver is a disease to which Dr. Budd has devoted considerable attention, and it is described with great care in the present edition. As a specimen of the author's style, we quote the following passage on the effects of cirrhosis:—

"The emaciation and the loss of strength that occur in cirrhosis may depend, in part, on direct injury to the stomach and other organs, caused by the habits of life that induce cirrhosis; but they are, no doubt, mainly owing to atrophy of the lobular substance of the liver, and to the impediment which the disease creates to the passage of blood through the liver, and to the escape of bile from it. The obstructed circulation impedes the absorption of water and other nutritive substances by the veins of the stomach and intestines; keeps the mucous membrane of this portion of the intestinal canal, and the glands associated with it, in a permanent state of congestion, and thus enfeebles the digestive power; and when the obstruction is so great that the blood is diverted from its appointed channel, it must tend directly to produce an impure condition of the blood. That part of the portal blood which does not pass through the liver, but finds another way back to the heart, cannot be freed from the principles of bile, and be otherwise purified, as it should be, and must therefore contaminate, to a certain degree, the whole mass of blood with which it is mixed. Impediment to the escape of biliary matter from the lobules and through the small bile-ducts, impairs nutrition directly, by causing a deficiency of bile in the intestinal canal, and a bilious impregnation of the blood; and it has a more remote injurious effect, by being an additional cause of atrophy of the lobular substance. Destruction of the lobular substance of the liver tends to impair nutrition, by rendering the secretion of bile defective, and thus deranging the work of the intestinal canal, and by leading directly to an unhealthy and impoverished condition of the blood, which, in consequence of this destruction of the lobular substance, is imperfectly filtered in the liver, and does not undergo there those reparative changes which the action of the healthy liver causes. Whenever, from any cause, much

of the lobular substance of the liver is destroyed, a state of anemia results."—P. 158.

In treating of the therapeutics of cirrhosis, Dr. Budd strongly insists upon the necessity of the early adoption of remedial measures, although from the insidious nature of the malady it often escapes notice, or is neglected by the patient. It is well known that Dr. Budd considers cirrhosis to be a species of inflammation, and his treatment is depletory, in accordance with this view. But in the more advanced stages, as where ascites has supervened, treatment may still be servicable.

"Even at this stage of the disease, if there have been any recent inflammatory action in the liver, and there be lymph within it that can still be absorbed, good may result from small doses of blue pill or iodide of potassium, which may be given in conjunction with mild diuretics. If diuretics be given alone, they generally fail of effect, because when, from cirrhosis or any other condition, much ascites exists, the liquid in the peritoneal sac compresses the kidneys, and prevents their action. The influence of this pressure is made very manifest by the operation of tapping. It is almost constantly found that when by tapping the liquid in the belly is withdrawn, there is a more abundant secretion of urine, and that the quantity of urine again diminishes as the liquid in the belly collects again."—P. 164.

Again:—

"In a few instances, after mercury and diuretics have failed, I have seen the ascites removed for a time by hydragogue purgatives. A good purgative of this class is an electuary made by mixing cream of tartar and jalap, in equal parts, with confection of senna, and it is best given, as are all medicines of similar action, in a single dose in the morning before breakfast, as it then, besides the drain it causes from the coats of the bowel, only sweeps away the refuse of digestion; whereas, if it be given in divided doses during the day, it sweeps away the food that has been digested, but the nutritious particles of which have not been absorbed. It sometimes happens, especially in hard drinkers, that a disposition to nausea exists in the morning, and the medicine is then best given at night. The action of hydragogue purgatives is much increased by giving them in a concentrated form, and by restricting as much as possible the quantity of liquids consumed by the patient."—P. 166.

From some cases which have lately fallen under Dr. Budd's notice, he is inclined to believe that a permanent stoppage of the common gall-duct occasionally leads to a morbid state of the duodenum, sometimes ending in ulceration, and characterized by hæmorrhage from the bowel. One or two cases are given in illustration of this view, which, however, requires further elucidation from the results of practical observation and post-mortem inspection.

The scope of our remarks will not allow us to follow Dr. Budd through all the subjects comprehended in his treatise, but the following points are among the most interesting:—

The existence of abscess in the liver appears to be due in many cases to ulceration of the mucous membrane of the intestines, gall-bladder, and gall-ducts, and the consequent contamination of the portal blood in its passage to the liver. This view of the causation of hepatic abscess is argued by Dr. Budd at considerable length and with great force.

Another interesting point is the power which the liver seems to possess of retaining noxious matters brought to it by the portal blood; so that when abscesses form in the liver in consequence of noxious matters brought to it by the venæ portæ, or when cancer originates in it, or is propagated to it from the intestine, the disease seldom extends beyond the liver itself.

A section of the work is devoted to the subject of scrofulous enlargement of the liver, which is shown to be connected with chronic disease of the bones, and several cases are given in illustration of this connexion.

In treating of the diseases of the gall-bladder, it is shown that the mucous membrane of this viscus is subject to a species of degeneration analogous to that which occurs in the coats of arteries, and which Dr. Budd therefore proposes to call *fatty degeneration of the gall-bladder*. He considers this disease to be one of great importance, as it is not uncommon in the decline of life, and may be attended with serious results. It is always attended with an abundant secretion of cholesterine in the gall-bladder, which frequently leads to the formation of gall-stone; after a time it causes sloughing of the lining

membrane of the gall-bladder, and by rendering the coats of the bladder rigid, prevents it from being completely emptied. Thence the retention of the bile and of the unhealthy secretions of the gall-bladder, which undergo decomposition and excite inflammation of its inner surface. If the cystic duct should become blocked up by a gall-stone or otherwise, as not unfrequently happens, the gall-bladder is converted into an abscess, with rigid and uncontractile walls, almost necessarily causing great and protracted sufferings, and which may even destroy life.

These are among the prominent topics touched upon in Dr. Budd's new edition; and we have not analyzed it more completely because its general features are already so well known to the Profession that a detailed review of its contents would be superfluous. It is the best work on Diseases of the Liver in any language.

The Principles of Collegiate Education discussed and elucidated, in a Description of Gnock College, Vale of Neath, South Wales Pp. 87. London, 1857.

GNOLL College is situated in the midst of a district rich in natural beauties, and abounding in mineral wealth. It is sufficiently near to the metropolis to make the access easy, and yet removed to such a distance from any large town as to secure to students the advantages of retirement. In this locality it is intended to open, in October next, a College for the instruction of youth between the ages of 18 and 21, in every branch of learning; and it is believed that the course of instruction which will be offered will qualify the students for any profession or pursuit in life. The salaries of the professors and tutors will be on a liberal scale, and the payments for the scholars will be proportionally high, being about equal in amount to the annual sums expended upon youths at our Universities. The principles of the founders of Gnock College are indisputably good, and the whole scheme appears perfect on paper; and our best wishes are offered for the success of the undertaking, the sole obstacle to which, as the originators of the College have been informed, is that the plan is too complete to be carried out.

Guérison Radicale de la Goutte. (Radical Cure of Gout.) Par le Docteur G. BOREL DE MENS, Médecin-adjoint de l'Hôtel Dieu, etc. Paris. 1856.

THIS pamphlet consists of a very common-place and imperfect description of the symptoms and pathology of gout, together with an eulogium of a secret remedy employed by the author and prepared by a pharmacien in his confidence. On the principle, we presume, of *ignotum pro magnifico*, the author favours his readers with copious extracts from the *Latin* version of Hippocrates, which, however, he kindly translates into French. It would probably have answered the purpose more effectually if he had given the quotations in Greek. The agonies of gout are portrayed in forcible language, in order no doubt to induce the sufferers to resort with the greater alacrity to the use of the anti-gout mixture, discovered by Dr. Borel de Mens, who, as we are informed in a handbill accompanying the brochure, may be consulted every Monday and Friday from 12 to 4 o'clock; communications (post-paid) duly attended to. The Physicians and Surgeons of the Hôtel-Dieu should keep an eye upon their colleague.

GENERAL CORRESPONDENCE.

THE TWO BILLS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I feel sure the Profession will thank you for speaking out, about the attempt made by the supporters of Mr. Headlam's Medical Bill to avoid discussion, and render their proceedings as secret as possible. I can bear witness to the fact that copies of Bill No. 1 were with great difficulty obtained before its first reading; and when, by a lucky accident, I stumbled upon one, I found printed on the top "Secret and confidential."

The framers of Mr. Headlam's Bill evidently proceed on the assumption that this is a matter of indifference to the general body of Practitioners, and that the interest and sanction of the Medical Corporations is the only thing worth consideration.

But it is of the proceedings of the last deputation to Lord Palmerston, as reported by one of themselves, that I wish to direct the attention of your readers; and first, to Dr. Mayo's pretensions of disinterestedness in opposing the Bill of the Select Committee, because it would actually raise the importance and dignity of existing Physicians. It was quite evident that Dr. Mayo had entirely overlooked the large addition to the annual income which would accrue to the President and Examiners of the College of Physicians out of the pockets of University Medical Graduates, should their disinterested efforts procure the passing of Mr. Headlam's Bill!

I am convinced that it is an entirely erroneous supposition that a one portal scheme for all licentiates in Medicine and Surgery would, as Dr. Mayo asserts, depress the standard of education, and leave no inducement to seek higher honours where they are to be gained. In important cases, an intelligent public would not rest satisfied with the unaided services of a Medical attendant who possessed the minimum qualification. There is ample proof of this even at the present time, in the number of men who seek University degrees, in addition to other qualifications, and purpose to practise where such a University degree is no more than an honorary distinction. Enough has been said about the claims of the Council of the Corporations to represent the Profession; but since this misrepresentation has been again put forward by the deputation, let me remind your readers, that the members of the College of Surgeons, or licentiates of the College of Physicians (few as the latter may be), have no voice whatever in the proceedings of their Colleges. Their transaction with a College is simply an examination, a considerable fee (paid if they pass), and the College recognises them no further. Truly, if intelligence be a necessary qualification for a franchise, it should be accorded to the intelligent members of the respective Colleges. But there is no promise or purpose of such extension; and, if the Practitioners of England allow the Corporations and Universities to assume the powers of a regulating Council, because they represent the Profession, there is an end to all true representation of interest of members, and reform only benefits the few in power.

No one would be more delighted than your subscriber, that our noble Profession should be regulated by a council of its own election; and it might be well to have some promise from Government that, as soon as the Corporations and Universities were thoroughly reformed, and truly represented the interests of the Profession at large, that then the government should be committed to their hands; but until such is the case no other expedient is feasible than a Crown nomination. With all deference to Mr. Green (and I feel that whenever his name is mentioned by a member of the College it should be with the greatest respect), if the principle of representation is recognised in the College, why is it not extended, instead of being kept at the lowest possible point? It is thus a dead letter.

I am given to understand that the faculties of the Scotch Universities have ever been ready to listen to any project for representing the interests of their graduates in the Universities, but that hitherto they have been opposed by the patrons. Did any such disinterested purpose exist with the ruling powers of the Colleges, the intention might at once be carried into effect, as they are totally irresponsible to any higher power or authority.

The College of Physicians seems completely lost to all sense of its dignity to serve its own interests. Not only does it assert what is untrue in its "reported circular," but after a direct contradiction of the statements there contained, Dr. Burrows (if correctly reported) again deliberately asserts that the Scotch Universities are alone in favour of Lord Elcho's Bill, which is manifestly not the fact, as it is supported by the University of London, besides others. In no country in the world do councils of corporations exercise the legal functions of licensing bodies without any responsibilities either to the State or the public. On the continent the Universities license both in Medicine and Surgery, but are responsible to Government for a proper exercise of their powers; and nowhere does science make more progress, or the Profession command more respect.

Now that I have done with the deputation, allow me to remark, that the ground taken by the extra-academical lecturers in Edinburgh while supporting Mr. Headlam's Bill, is by no means tenable. They argue that because the Agrégé Professors take a part in the examinations abroad, that the

extra academical lecturers should take a similar position in Great Britain. Yet there is no parallel in the circumstances of the two, for the Agrégés in France and elsewhere are really sub-professors in the University, and have been examined by the University for their rank as such, while the extra academical lecturers are self-appointed, and are in direct opposition to the University, generally lecturing at the same hour as the Professor, with the avowed intention of drawing away his pupils.

I understand that the Universities here and in Scotland are quite willing to submit to any reasonable assessorial power of the State, which shall enforce competent and equal examinations, but that they will not be subordinated to any College of Physicians, or admit opposition lecturers to their examinations.

Lastly, I have heard much within the last few weeks of the opinions of the general Profession on the rival Medical Bills, and I feel convinced that the numerous petitions on one side of the question show that Sir Charles Hastings has well managed the Association, but that the petitions do not represent the interest or comprehension of the difference in the Bills on the part of the bulk of the Profession.

London, June, 1857. I am, &c. M.R.C.S.L.

SALE OF POISONS.

[To the Editor of the Medical Times and Gazette.]

SIR,—The leading article in your last week's Number, on the sale of poisons, clearly points out the absurdity of exempting laudanum from the proposed restricted list, when it is well known that this drug is the one chosen in the majority of cases of suicide and child murder. Yet the public justly complains, that a sufferer from a sudden attack of toothache or neuralgia, being unprovided with a proper certificate, is obliged to "grin and bear it." Might not these unfortunates be relieved without interfering with the object in view, by permitting all qualified chemists to administer a single dose, (not exceeding mxx. for an adult,) provided it were swallowed in their presence? The benefit would thus be obtained by the public without fear of dangerous consequences, for in a person obtaining frequent small doses with suicidal intentions, the symptoms of the drug would be manifest to an intelligent chemist before a poisonous dose could be obtained. A larger quantity than twenty drops would be unnecessary, since those frequently suffering, or in the habit of taking opium in large doses, would be careful to provide themselves with a certificate against any emergency. I am, &c.

Dartford, June 17.

ANTIDOTE.

MEDICAL REFORM.

[To the Editor of the Medical Times and Gazette.]

SIR,—These few hastily-written lines will point only to one vital error in Mr. Headlam's Bill (clause 30), by which it is expressly proposed that Physicians shall not be entitled to recover reasonable charges in any court of law for any Medical advice, attendance, or medicines prescribed by them. This would, indeed, be a positive denial of common justice, and would inflict a great injury on the majority of that grade. It is true, some dozen or more Physicians attached to the large Hospitals, having an European reputation, may naturally smile at what would be of great importance to their less fortunate brethren; but to flatter their pride by the infliction of an injury on the majority would be an evil of no small magnitude. Provincial Physicians, and the greater number of those practising in London, form connexions in the course of time, and become "family doctors," noting down their visits, and sending, when required, a memorandum of the sum due, sometimes at the termination of the illness, or more frequently at the end of the year. Of course, litigation should be used sparingly, otherwise it would prove suicidal; but to deny the Physician the right of recovery would be nothing less than legal robbery. The writer, in the course of many years' practice, has suffered severely from this denial of justice, simply because it was known that, as a Physician, he could not legally enforce his honest claims. Give him, under the new Bill, the power to do so, and, doubtless, his future losses would be trifling. Hoping you will urge the necessity of making an alteration in clause 30,

and suggesting to my brother Physicians the advisability of enlightening Lord Palmerston on the subject,

I am, etc.

London, June 22, 1857.

A PHYSICIAN.

MOVEABLE KIDNEYS.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the *Medical Times and Gazette* for June 6, 1857, I see a report by Professor Oppolzer, on the subject of "Moveable Kidneys." I remember many years ago to have been requested by Dr. Langmore to examine the body of an old lady who was said then to have "slipped her kidney." The fact is, that the right kidney could be felt readily beneath the integuments of the lumbar region, and above the crest of the ilium. I am not aware that any inconvenience resulted from this, but the attention of her medical attendant was directed to it; and after her death I was requested to make an examination into this rather rare phenomenon. The only peculiarity remarkable was, that the kidney appeared bound down in its situation more loosely than usual, and the old lady, from having been very fat, had become somewhat thinner, and her integument appeared very lax throughout. This condition of the kidney had nothing whatever to do with the cause of death.

If you think this worthy insertion, you are at liberty to make use of it. I am, etc.

JOHN ADAMS.

4, St. Helen's Place, June, 1857.

THE ARTIFICIAL MEMBRANA TYMPANI.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you allow me to make a few remarks on Mr. Yearsley's statement respecting the *modus operandi* of the artificial membrana tympani (in your No. of the 13th inst.) Agreeing with him as to the desirableness of a satisfactory theory of the effect produced, it appears to me that the view he proposes cannot be accepted as such.

The improvement of the hearing may be temporarily obtained without the use of any solid substance, merely by a bubble of water or other fluid occupying the aperture, in which case the closure of the cavity is the only effect, no support being possibly rendered to the ossicula. The question, however, is an experimental one, and I conceive that few of those who have made use of the membranes introduced by Mr. Toynbee will have any hesitation in giving the preference to the theory proposed by him. The characteristic click, click, heard when the membrane reaches the bottom of the meatus, appearing to depend upon the escape of the last bubble of discharge or air indicates closure of the cavity, and the instances are very frequent in which the accurate adjustment of the membrana, completely to cover an aperture of small size, is attended with the most marked benefit. Mr. Toynbee's investigations also, which have proved the tympanum to be a closed cavity, and the observations made by Dr. Jago on the great impairment of hearing arising from a patent condition of the Eustachian tube, strongly favour this view of the question. Having myself used the cotton wool several times I have put to the test Mr. Yearsley's opinion as to the necessity of leaving an aperture, and must own that even with that substance I have not been able to convince myself that it is the case. At the same time there is no doubt that a small aperture in the membrana tympani may sometimes be of no serious detriment to the hearing, and the beneficial effect of the various substances Mr. Yearsley enumerates would seem to show that such may exist in some cases without preventing the desired result. Whenever, however, there is any other cause besides the perforation operating prejudicially to the hearing, perfect closure of the cavity seems to be very essential.

I am, &c.

JAMES HINTON.

ASSOCIATION OF MEDICAL OFFICERS OF ASYLUMS AND HOSPITALS FOR THE INSANE.—The annual meeting of this Association will take place in London on Thursday, July 2. The President for the ensuing year (Dr. Forbes Winslow) will receive the members of the Association at a *conversazione*, at 23, Cavendish-square, on Wednesday evening, July 1.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, MAY 19.

Dr. WATSON, President, in the chair.

Mr. JABEZ HOGG exhibited a specimen of

LARGE HYDATID CYST IN THE LIVER.

The patient, a man aged 45, had suffered from symptoms of hepatic disturbance for about eight months before his death. Several attacks of severe pain about the epigastrium, attended with sickness and jaundice, had occurred, and in their intervals he had been the subject of deficient appetite and debility. The existence of a tumour in the right hypochondrium was first discovered about a month before death. The tumour projected somewhat, and presented a large area of dulness. Excepting in the first attacks very little of pain, tenderness, or of vomiting, or gastric disturbance was present, although the symptoms were those of complete biliary obstruction. Rigors had several times occurred. Death was preceded by an attack of distressing dyspnoea. At the autopsy the liver was found adherent to the diaphragm, and in its right lobe was a very large hydatid cyst, which contained a quantity of gelatinous matter, and many fragments of smaller and finer cysts. In the fluid a few echinococci, and some loose hooklets were found. Most of the smaller cysts were broken up, and had apparently long been dead. The gall duct had been completely obliterated by the pressure of the cyst upon it.

Mr. HUTCHINSON asked whether the propriety of puncturing the cyst as a measure of treatment had ever been entertained. He had seen several in which recovery had followed that practice.

Mr. HOGG stated that it had been thought of, but at first was considered not justified; and at length the man sank rather unexpectedly.

Dr. WILKS exhibited a specimen of

PUERPERAL OSTEOPHYTES IN THE CALVARIA.

The specimen exhibited appeared to afford an example of the condition of the skull, mentioned by Rokitansky as occurring in pregnant women, that pathologist having stated that the inner surface of the bones of the head became covered with a new layer of osseous tissue in every successive pregnancy, and that the deposit is found in the form of delicate laminae along the course of the longitudinal sinus, the sutures, and occasionally as distinct patches on the base of the cranium. The present specimen came from a woman 21 years of age, who died at the 6th month of gestation, and upon examining the calvaria a new distinct layer of bone was found, occupying each side of the longitudinal sinus, and also in the course of the furrows for the meningeal arteries. The surface was smooth and white, and when carefully examined was evidently composed of a new osseous growth. It so far confirmed the observations of Rokitansky; but Dr. Wilks stated that such new deposits of bone were so common that he felt considerable scepticism on the subject. The statement of the German pathologist had, however, never been disproved, and therefore he was anxious to know if any member had investigated it.

A discussion followed respecting Rokitansky's opinion, in which Mr. Henry, Dr. Ogle, Mr. Adams, and Dr. Wilks, took part. All seemed inclined to believe that the condition described occurred frequently in others besides puerperal women, and that it was not at all uniformly met with in them. They did not think that English experience gave much support to the views of the great German pathologist.

Mr. HUTCHINSON exhibited a specimen of

CYSTICERCUS CELLULOSÆ.

He brought it before the Society because its head presented a very beautiful microscopic object, being quite recent. He had obtained it that morning from the arm of a lad aged 8, who had been brought to him on account of a small movable tumour under the skin, near the insertion of the deltoid. The tumour had been known to exist for about eight months, and had never given the slightest pain. It was the size of a

small marble, and quite unconnected either with the skin or the deep parts. From having several times before met with small hydatid cysts in the subcutaneous tissue of the upper arm, resembling this in all outward characters, he suspected that this would prove to be one. After removal, however, it proved to be the cysticercus, and not the echinococcus hydatid. Its head, which was under the microscope, showed a very beautiful circlet of claws and the four large surrounding foramina. Mr. Hutchinson stated that, although this entozoon derived half its name from its making a nidus of the cellular tissue, yet, according to his experience and that of some others, it was comparatively very rare in that structure. He had never before the present one met with a cysticercus in the subcutaneous cellular tissue.

Mr. BIRKETT stated that he had seen several in that tissue, and had never seen them in other parts.

Mr. HUTCHINSON replied, that his experience had been singularly different. He had met with them more than once in the chambers of the eye, many times in the structure of muscle, and several times in the brain; but the above was the first he had found beneath the skin (a).

Dr. OGLE brought before the Society a specimen of

ANEURISM OF THE SUPERIOR MESENTERIC ARTERY.

It had been removed from the body of a young woman who had been admitted into St. George's Hospital on account of suspected phthisis, and who had died suddenly a few days afterwards. The aneurism, which was about the size of a hazel-nut, had ruptured into the peritoneal cavity, which contained a large quantity of coagulated blood. Dr. Ogle remarked upon the rarity of the occurrence of aneurisms of the smaller vessels in the abdomen.

Mr. BIRKETT exhibited a preparation showing

INFILTRATED CANCER OF THE HEAD OF THE TIBIA.

The patient, a married woman, under 30, and apparently in good health, became affected during her last pregnancy with pain in the upper part of the right shin bone. She was admitted into the Hospital soon after her delivery; a circumscribed swelling then existing, which was tense and elastic to the touch, and placed over the inner aspect of the bone, just below the knee. She left the Hospital for a time, there being considerable doubt as to the diagnosis. On her return the enlargement was much greater, and she was now willing to submit to the removal of the limb. Previous to the operation a puncture was made, but only blood escaped. The glands in the groin were somewhat enlarged. After amputation the whole head of the tibia was found infiltrated by a whitish soft deposit, evidently of malignant nature. The cancellated bone had been entirely replaced by this material. Mr. Birkett wished especially to direct the attention of the Society to the complete substitution of a morbid growth for the normal texture of the part, remarking that he considered this very strongly indicative of cancer.

Mr. BIRKETT also showed the portrait of a patient, the subject of

MAMMARY GLANDULAR TUMOUR OF UNUSUAL SIZE.

The patient, a woman aged 84, had carried the tumour for fifty-three years, having always declined to have it removed. She had consulted Sir Astley Cooper early in its history, and had been assured by him that it would never do her any harm. It had now become very large and was somewhat pendulous, but no ulceration of the skin had ever been threatened, nor had it ever caused any inconvenience, excepting from its size. Mr. Birkett adverted to the correctness of the prognosis given by Sir A. Cooper, and remarked that the older Surgeons, although they called these tumours by other names than those now in use, and were unacquainted with their histological characters, were yet well aware of their innocent nature.

Dr. HAWKSLEY exhibited

THE THORACIC ORGANS, FROM A CASE OF SUPPURATIVE PERICARDITIS IN AN INFANT.
The subject of the disease, a somewhat delicate child, aged 5 months, had been severely ill a fortnight pre-

(a) Mr. Hutchinson wishes to add to this report that about a week after the meeting he had occasion to remove a second specimen of the cysticercus from beneath the skin of the mammary region of a girl.

vious to the fatal termination. For the first week the symptoms were those of remittent fever, then of a state of depression, accompanied by a slight lichenous eruption, and for the last four-and-twenty hours of its life by extensive patches of purpura on the legs and body. The only general symptoms that might have led to the discovery of the mischief taking place within the pericardium of a child so young as this, were the following:—The mother observed at one period, within the first few days of the commencement of the illness, that the child was restless and evidently in pain when laid on the left side; subsequently, at a later period of the disease, she found it equally impossible to lay it on the right side. Its easiest position was the dorsal, and with the trunk on a horizontal level. She found that the attempt to lift it into the sitting posture, or to bend the spine forward gave great uneasiness. The child spontaneously kept its spine arched rather backward. There was also, for the last few days of its life, great hoarseness, from the pressure doubtless on the trachea; another remarkable sign for the last week of its life was, extreme restlessness, no sleep day or night, accompanied very commonly by elevation of the arms, and throwing about of the hands. At the post-mortem examination, the pericardium was found adherent to the sternum, and extraordinarily distended by fluid; so that the tumour it formed had flattened the left lung against the spine and compressed the trachea. On opening it, at least three ounces of what appeared pure mature pus were found. The visceral serous layer was found covered by firmly adherent villi of soft fibrin, particularly that part covering the origin of the vessels, while the parietal layer possessed its usual polish and smoothness. There was no endocarditis, nor could a sign of any other disease, or any deposit, be found in the body, except a very slight point of puriform matter, just beneath the capsule, in the upper end of the right kidney. The matter found within the pericardium having been submitted to the test of the microscope, it was found to consist, not only of the ordinary pus globules, with all their proper characteristics, but also of large compound cells and of fat globules, the whole contained in a molecular base.

Mr. ASHTON exhibited a specimen of

STRICTURE OF THE SIGMOID FLEXURE OF THE COLON.

The specimen was removed from a lady, aged 35, the mother of twelve children. Her general health had always been tolerably good. For some years she had been subject to constipation, and the action of the bowels was always attended with great straining. On 25th March, 1857, symptoms of internal obstruction set in, attended with stercoraceous vomiting. She lived till 25th April, a few days prior to which a considerable quantity of feces passed per anum. An examination after death revealed the intestines enormously distended and highly congested. A stricture existed at the sigmoid flexure of the colon, above which the intestine was greatly enlarged and ulcerated in its whole circumference.

NORWICH PATHOLOGICAL SOCIETY.

DONALD DALRYMPLE, Esq., President.

Mr. DALRYMPLE read a paper on

APOPLEXY AND DISEASE OF THE BRAIN.

Mr. G. was in his usual health on the 23rd of September, 1856; rose early, and took his bath and breakfast. While reading prayers he was observed to tremble a little, but after this he wrote some cheques, and played on the floor with his infant boy; at a quarter before ten, while sitting on a sofa he slipped slowly off it on to the floor, and when raised, was unable to speak; was unconscious, and paralysed on the right side. He was taken to bed, and Medical aid summoned. I found him breathing stertorously, pupils closely contracted, the right side was paralysed, the left in strong convulsions, lips bluish, face congested, head not very hot; pulse very quick, but not hard or bounding. He had been bled to a small amount, which had acted on the circulation; calomel was given, and sinapisms applied to the feet and legs. After a short time, the pulse rising again, 8 leeches were put on the temples, which soon reduced the pulse, and they were taken off. At one o'clock he became more tranquil, the convulsions ceased, and the breathing became less laborious; at this time

he was sick, and vomited unconsciously to a small extent. About 3 p.m., his breathing again became more laborious, and his face more dusky, pulse more rapid and feeble. The pupils began to dilate, and the mucus to collect in the trachæa; in short, he would have died then had he not been raised into the erect posture, in which position he was maintained till he died, at 6 p.m., asphyxiated, a little more than 8 hours after he was seized.

This gentleman's history is somewhat curious; at his death he was 47 years of age; when about 20, he suffered from fever, which was followed by a psoas abscess; for four or five years it continued to discharge, occasionally closing, and as often as it did so, symptoms of pressure on the cerebro-spinal system showed themselves, which were always relieved when the abscesses reopened. At length the abscess closed, and from that time till he married, he had only one attack of head symptoms, but that was severe and almost maniacal in character. From this time till the fatal seizure, a period of 15 years, though eccentric in manner, and at times dull and apathetic, he yet had no cerebral attack. He was a man of great acquirements and retentive memory, and it is curious to note how great mental endowments may co-exist with diseases of cerebral structure.

Post-mortem.—The head only was examined; the scalp was vascular, the cranial bones hard, but not thickened; dura mater closely adhering along the centre of calvarium. A large quantity of fluid blood was found between the hemispheres, lying on the corpus callosum. In the midst of the left hemisphere, the structure of which was torn up and rifled, as if by a ball, lay a recent clot of about 2 oz. in weight; the left lateral ventricle was full of blood, and the cerebral tissue around the extravasation was disorganised. The brain generally was very soft, but not highly vascular. The arteries were diseased throughout, and in one of the branches of the basilar was found an opening of the size of a split hemp seed. Beneath the anterior lobe of the right side there was an aneurismal dilatation of an arterial branch, about the size of a horse bean, and resembling an old apoplectic clot.

Mr. CADGE mentioned a case of

FIBROID TUMOUR.

A labourer, aged 45, was admitted into the Norfolk and Norwich Hospital, having a large tumour on the front of the abdomen. It commenced to grow about 18 or 20 years ago. About 10 years since it was removed; about 4 years after the operation it returned in the cicatrix, and in two years it reached a large size, and was again removed. The tumour re-appeared a third time, about one and a half year after the last operation, and at the date of admission it had the appearance of a cluster of fibrous tumours occupying a large portion of the front of the abdomen; the man's health was not much impaired, and the disease was a third time removed by operation. The mass weighed between two and three pounds, and on examination seemed to be non-malignant as to its microscopic character, and to belong to the class of tumours described as "Recurring Fibroid," by Mr. Paget. The patient made a good recovery.

Mr. KIDD, of Blofield, exhibited a specimen of

MALIGNANT TUMOUR OF TESTIS.

This specimen was taken from a man, aged 30, who died of phthisis. The disease, which was supposed by the patient to be a rupture, was first noticed about four months before death, and steadily increased till at the time of his death it was of the size and shape of a cocoa-nut; firm and in parts elastic to the touch, the scrotum was unadherent but tense and covered with large and tortuous vessels. It was painful, but not severely so. The tumour, when a section was made, was observed to be enclosed in a distinct capsule, and to have the ordinary appearance of medullary sarcoma. Under the microscope a number of compound nucleated cells and free nuclei were perceived.

Dr. DOVE mentioned a case of

APOPLEXY WITH CONVULSIONS.

R. F., aged 34, a short, somewhat stout man, of intemperate habits and sallow complexion. He had at times been subject to giddiness, heaviness in the head, and partial loss of power of the lower limbs. Nov. 1. He complained of headache and sickness. 2nd. While undressing he fell, apparently exhausted; he soon became comatose, pupils contracted, breathing easy and quiet; in about half an hour he was seized with tetanic convulsions, the jaw was locked, and the back was

arched; there was grinding of the teeth and foaming at the mouth. The muscles never fully relaxed, but there were paroxysms of tetanic spasms every few minutes. He died in about three hours.

Post-mortem.—The cranium was thin, except a portion of the frontal bone which was of unusual thickness. The dura mater was free from adhesions and dry. Arachnoid transparent throughout. Pia mater much injected. A thin layer of black fluid blood was found extending over the anterior lobe and base of the brain to the medulla oblongata and cervical spinal cord, completely surrounding the latter, and giving it the appearance of having been painted black. There was a small clot and some black fluid blood in the lateral ventricles. The substance of the brain was hard and hypertrophied. The cerebellum soft; no extravasation in the tissue of either.

Mr. GARTHON mentioned a case of

POISONOUS EFFECTS OF EATING PRIVET BERRIES AND ACORNS.

Thirty-seven children belonging to a "Girls' Home" were allowed to wander in a wood, where they ate an immoderate quantity of acorns and privet berries. Soon after, they were seized with the following symptoms:—The hands and face were shrivelled and of a bluish appearance; they were all attacked with opisthotonos, intense thirst and sickness, but without the power of vomiting. An emetic was administered, and in about half an hour they discharged an enormous quantity of half-masticated acorns and dark coloured pips of the privet; the fluid was almost black and of an offensive odour. The tetanic symptoms gradually subsided. The children still complained of intense pain over the stomach. The emetic was repeated, and more offending matter was vomited. On the following day, a full dose of castor oil was administered; the motions produced by it were nearly black and most offensive. The urine was high-coloured and scanty. It was nearly a fortnight before the children regained their usual health. The sequel remains to be told. Six of the children, whose average age was scarcely thirteen years, menstruated for the first time on the fourth day after the occurrence, while fourteen others, who had menstruated before, and that within a fortnight, had a recurrence of the discharge.

OBITUARY.

SIR ROBERT CARSWELL, M.D.

THE following announcement was received last week by many of the friends of Sir R. Carswell in this country:—

"Lady Marguerite Carswell, née Chardenot, a la douleur de vous faire part de la perte cruelle qu'elle vient de faire de son époux, Sir Robert Carswell, Knight, M.D., Médecin ordinaire de Sa Majesté, le Roi des Belges, Chevalier de l'Ordre de Léopold et de la Légion d'Honneur, natif de Thornbank en Ecosse, décédé à Laeken, à l'âge de 64 ans, après une longue et douloureuse maladie. L'inhumation aura lieu au cimetière de Laeken, jeudi 18 de ce mois, à trois heures de relevée. Laeken, le 15 Juin, 1857."

The career of Sir Robert Carswell was in many respects so remarkable, and he did so much for morbid anatomy and pathology, that we shall take an early opportunity of bringing a full notice of his life and writings before our readers.

SIR JAMES EYRE.

Sir James Eyre was born in 1792. His father was a Buckinghamshire clergyman. From 1806 to 1811 he was a pupil of Mr. Davenport, a Surgeon of Harborough. In 1811 he became a house pupil of Mr. Phillips, the Surgeon to the Marylebone Infirmary. In 1812 he became House-Surgeon to this Infirmary. He attended the Windmill-street school, and St. Bartholomew's, and in 1813 went to Hereford to assist the late Mr. Griffiths. He came to town in 1814 to pass the College of Surgeons, and returned to Hereford to practise as a Surgeon. He married in 1816, worked hard as a Surgeon, was elected a member of the corporation, and in 1829 Mayor of Hereford, his father, then 78 years of age, coming to preach the inauguration sermon. In 1831, on the accession of William IV., an address of congratulation was

presented to the sailor king, and the Mayor of Hereford was knighted, the Mayors of Hereford and Liverpool being the only two who received the distinction on that occasion. From 1831 to 1833 Sir James studied medicine afresh in Edinburgh and Paris, and took the degree of M.D. at Edinburgh in 1834. He settled in London in the same year, and was elected Physician-Accoucheur to the St. George's and St. James's Dispensary, which office he filled for seventeen years, when he gave up midwifery practice. He became a licentiate of the College of Physicians in 1836. In 1845 he published his work on "Exhausting Diseases," strongly recommending the use of the oxide of silver. In 1852 his "Stomach and its Difficulties" appeared. For several years past he resided in Brook-street, but he never had an extensive Medical practice in London. He attended Her Majesty's *levée* on Thursday, and was quite well until late that evening, but on Friday morning he had gone from among us.

The following account of his death is from the daily papers:—On Saturday Mr. W. J. Payne, Coroner, held an inquest at the Bowyer Hotel, Clapham, on the body of Sir James Eyre. It appeared that the deceased and his lady were staying at the residence of Mr. Scholey, Lauriston-house, on a visit. On Thursday he had attended the Queen's *levée*, and sat up playing at whist till a quarter before one o'clock on Friday morning, when he remarked, "I think it is time to leave off playing at cards," and went up to bed, his lady having preceded him. He was in no way excited, but was in his usual health. About five o'clock the same morning Lady Eyre's bell rang, and on the servant going up, the deceased was found in the bed by her side, dead. Mr. R. C. Parrott, Surgeon, who was one of the whist party, expressed his conviction that death had resulted from some vessel of the brain having given way. Verdict, "Natural death." It would appear that no post-mortem examination was made.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS.

LUNACY BILL (SCOTLAND).

Sir J. OGILVY rose to ask the Lord Advocate if it were his intention to make any provision in his Lunacy Bill for the proper management and training of weak or imbecile children.

The LORD ADVOCATE said that his hon. friend, on the bringing up of the Lunacy Bill that night, would see what he proposed. He did not know that it would be proper or necessary to introduce such a provision into a general measure.

INCORPORATION OF PUBLIC CHARITIES.

Leave was given to Mr. EVANS to introduce a Bill for the Incorporation of Public Charities.

ADULTERATION OF FOOD.

Mr. Scholefield gave notice that on Thursday next he should ask leave to introduce a Bill to prevent the adulteration of food.

PETITIONS.

The following petitions have been presented during the week:—By Mr. Puller, from the Medical Officers of the Buntingford Union; by Sir J. Carnac from the Medical Officers of Lymington Union; by Mr. Kinglake, two petitions from the Medical Officers of the Bridgewater Union; by Mr. Moody, from Dulverton; by Mr. Buller, from the Medical Officers of the Okchampton Union, in Devonshire; by Mr. Clay, from Medical Officers of Sculcoates Union, Hull; by Mr. W. Beach, from the Medical Officers of the Andover Union; by Sir T. Winnington, from the Medical Officers of the Kidderminster and Martley Unions, county of Worcester; by Mr. Bramston, from Medical Officers of Dunmow Union; by Mr. W. Knatchbull, from the Medical Officers of the Keynsham Union, county of Somerset; by Mr. W. O. Foster, from the Medical Officers of the Seisdon Union, Staffordshire; by Sir J. Trollope, thirty-five petitions from various Poor Law Unions; by Mr. Hanbury, from the Medical Officers of the Shoreditch Union; by Mr. Cayley, from Richard Chapman, M.D.; from Medical Officers of Leyburn Union; by Mr. Du Pre, from Medical Officers of Amersham Union; by Mr. Trefusis, from the Medical Officer of the Lynton district of the Barnstaple Union; by Colonel L. Watkins, from the Medical Officers of the Builth Union, and of the Brecknock Union; by Mr. Bovill, from the Medical Officers of the

Guildford Union; by Lord E. Bruce, from the Medical Officers of the Pewsey Union, Wiltshire; by Mr. Crossley, from three Medical Officers of the Halifax Poor Law Union—namely, Messrs. Garlick, Peacock, and Crowther; by Sir J. Potter (5), from Medical Officers of the Manchester Union; by Mr. R. J. R. Campbell (27), from and on behalf of Medical Officers of the Poor Law Unions; and by Mr. Gore Langton, from the Medical Officers of the Taunton Union, praying for redress of grievances.

Petitions in favour of Mr. Headlam's Bill have been presented by Mr. Horsfall, from the Medical Officers of St. Ann's Dispensary, and the Eye and Ear Institution, Liverpool; by Sir J. Potter, from the Medico-Ethical Association of Manchester; by Mr. Cheetham, from Medical Practitioners in Staleybridge and Ashton-under-Lyne; and by Mr. C. Villiers, from Practitioners at Wolverhampton; by Mr. R. N. Philips, from Mr. James M'Gettigan, Mr. Jonathan Shaw, Mr. Samuel Beecroft, and Mr. Frederick Tinker, all of Hyde, Cheshire; by Mr. Cox, from Medical Practitioners in the borough of Finsbury, and against Medical Bill No. 3; by Sir W. H. Jolliffe, from Medical Officers of the Petersfield Union, against the present state of the law of Medical relief to the poor; by Mr. Hughes, from Medical Practitioners of Carnarvon, in favour of Medical Profession Bill No. 1; by Mr. Western, from certain Practitioners residing at Maldon; by Mr. Kershaw, from Medical Practitioners of Stockport; and by Lord Melgund, from Abergavenny. A petition in favour of Lord Elcho's Medical Bill was presented by Mr. Selater, from the Medical men of the town of Alton.

Petitions praying for an alteration in the system of remunerations to Medical men, under the new Poor Law, were presented by Mr. E. C. Egerton, from the Medical Officers of the Macclesfield Union; by Mr. Colville, from the Medical Officers of the Burton-on-Trent and Tamworth Unions; by Mr. Du Pre, from the Medical Officers of Potterspurty Union; by Mr. Knatchbull, from the Medical Officers of the Frome Union, Somerset; by Mr. R. N. Philips, from Mr. John Parks, Medical Officer of the Bury Union; from Francis Nuttall, Medical Officer of the Elton district of the Bury Union; by Mr. J. H. Gurney, from the rate-payers of King's Lynn; by Mr. Hopwood, from Medical Officers of the Clitheroe Union; by Mr. G. Clive, from Medical Officers of the Hereford Union; by General Codrington, from Medical men of Greenwich; by Mr. Cobbett, from certain Medical Officers of the Oldham Union; by Mr. Hackblock, from Newton Abbott, Devon; by Colonel Kingscote, from the Medical Officers of the Clifton Union; by Mr. Greenall, from the Medical Officers of the Prescott Union; by Mr. Puller, from the Medical Officers of Berkhamstead Union; by Mr. Thornhill, from the Medical Officers of the Glossop Union; by Mr. Bass, from the Medical Officers of the Burton-on-Trent Union; by Mr. Western, from the Medical Officers of the Maldon Union; by Mr. Scholefield, from Medical Officers of the parish of Birmingham; by Mr. Charlesworth, from the Medical Officers of the Wakefield Union; and by Mr. J. Foley, from the Medical Officers of the Bromsgrove Union.

Petitions were also presented by Sir J. Shelley, from Mr. James Cowen, of Westminster, praying to be examined before a committee on the subject of Medical Reform and Medical monopoly; from Charles Edward Pratt and others, Practitioners of medicine at Appledore, in Devon, in favour of the Medical Profession Bill introduced by Mr. Headlam; by Mr. Roupell, from the Medical Practitioners of Lambeth, and of Clapham-road, and Stockwell, in favour of Mr. Headlam's Medical Profession Bill, and against Lord Elcho's; by Mr. Hopwood, from clergy, gentry, members of the Medical Profession, and ratepayers resident in the borough of Clitheroe, for a revision of the present system of Poor-law Medical relief.

Mr. Turner, from the Manchester Medico-Ethical Association, praying for the passing of a Bill to prevent the indiscriminate sale of poisons.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise on June 18th, 1857:—

JAMES, JOHN DAVIES, Bedwelling, Monmouth.

MEENES, EDWARD EVANS, London.

METCALFE, ROBERT, New Zealand.

PYLE, THOMAS THOMPSON, Earsdon, Northumberland.

SPRAKELING, ROBERT JOHN, Canterbury.

SUTTON, WILLIAM, Smithwick, near Birmingham.

TROLLOPE, THOMAS, Braintree, Essex.

WILSON, JOHN, Whitby.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 19th instant:—

BAZIRE, VICTOR, Mauritius.

BIGLAND, THOMAS, Bramham, Yorkshire.

CLIFTON, ROBERT W., East India Company's Service.

HARTLEY, Dr., Blackburn, Lancashire.

HATCHELL, CHARLES, Bengal.

LA FARGUE, G. F. H., Husband Bosworth, Leicestersh.

LAWRANCE, FREDERICK, Bleadon, Somersetshire.

M'CARTHY, JAMES JOSEPH, Royal Navy.

MACKARSIE, WILLIAM JOHN, Clay-cross, Derbyshire.

ROLFE, ALFRED GEORGE, Virginia, United States.

WEST, HENRY ROGER, Harpenden, St. Alban's.

WILLIAMS, JOHN DAVID, Criccieth, North Wales.

The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 22nd instant:—

ADAM, EDWARD, Dublin.

AGAR, WALTER JAMES, Cork.

CATLIN, GEORGE TAYLOR, Islington.

EGAN, CHARLES JAMES, Dublin.

FISHER, WILLIAM SHUTE, Charleville, co. Cork.

HOBSON, GEORGE WILLIAM, Aberdeen.

HUGHES, ROGER, Bala, North Wales.

SHOOTER, CHARLES, Bishop Wilton, Yorkshire.

DEATHS.

BERRYMAN.—On the 17th instant, at St. Austle, whither he had gone for the benefit of his health, Thomas Berryman, M.D., of Alverton, Penzance, Cornwall, aged 35. M.D. Edin. 1842; M.R.C.S. Eng. and L.S.A. 1843.

CARSWELL.—Lately, at Laeken, Sir Robert Carswell, Physician in Ordinary to the King of the Belgians. The deceased was born at Thornbank, in Scotland, and had attained his 64th year.

EYRE.—On the 19th instant, suddenly, at the residence of his friend, W. S. Scholey, Esq., Lauriston, Clapham, Surrey, Sir James Eyre, M.D. Edin. 1834; L.R.C.P. Lond. 1836; author of "The Stomach and its Difficulties," etc. etc.

HOWELL.—May 28th, at Palermo, in Sicily, in his 80th year, John Howell, M.D., Deputy Inspector-General of Military Hospitals.

HUNTLEY.—On the 17th instant, at Howden, Newcastle, George Hassal Huntley, Esq., Surgeon, L.S.A. 1843.

COUNCIL OF THE COLLEGE OF SURGEONS.—The following are the names of the eligible Fellows who are candidates for seats in the Council of this College at the ensuing election on Thursday, the 2nd of July next:—William Coulson, Frederick-place, Old Jewry, retiring from the Council in rotation; George Gulliver, St. Mark's Crescent, Regent's-park, retiring from the Council in rotation; Thomas Tatum, George-street, Hanover-square. Nominated by—Henry Charles Johnson, Savile-row; Bernard Holt, Parliament-street; Timothy Holmes, Curzon-street; Prescott Hewett, Hertford-street, May Fair; George Pollock, Grosvenor-street; Athol A. Johnson, Albemarle-street. The election is by personal ballot—"aye" and "nay,"—and not by balloting papers.

KING'S COLLEGE HOSPITAL.—On Saturday a public meeting was held in the great hall of Lincoln's-inn, for the purpose of raising a sum of £40,000, for the completion of King's College Hospital. His Royal Highness the Duke of Cambridge presided. An appropriate prayer having been offered up by the Bishop of London, his Royal Highness opened the proceedings of the day by observing that on that occasion he appeared for the first time as President of the King's College Hospital. (Cheers.) There was one point of view in which Hospitals were not sufficiently appreciated. Their chief purpose unquestionably was to administer relief to the sick and to heal the diseased; but beyond these benefits they

incidentally conferred a great and lasting moral service on many who became inmates of them. The habits, feelings, tendencies, and everything affecting the character of the individual must be benefitted by the moral training which the system pursued at such an institution necessarily imparted. In supporting public Hospitals, therefore, they were not only administering aid and comfort to the sick, but were preparing for them a better and happier existence through life, and a much more hopeful future in every sense of the word. (Cheers.) The Bishop of Oxford moved the following resolution:—"That the large amount of relief afforded at King's College Hospital to yearly increasing numbers of sick poor, freely admitted, not from the metropolis only, but from distant parts of the kingdom, is at once a proof of great public confidence and a ground for continued and extended support. He concurred with his Royal Highness that the closeness of the locality which formed the site of the Hospital, instead of being a disadvantage, was a great advantage, lying as it did close beside two great thoroughfares of the metropolis, from which branched narrow streets filled with houses of want and misery. The Earl of Harrowby, in seconding the resolution, said that in the presence of so many ladies he had peculiar pleasure in pointing their attention to that great object of female care, piety, and enthusiasm, the attendance of the sick in our great public hospitals. Sir W. Page Wood moved the next resolution:—"That by reason of the remarkable and progressive increase of the population of the metropolis, and the inadequacy of hospital accommodation to supply the wants of the inhabitants, especially in those central districts of London which lie between Holborn and the Thames, the early completion of the buildings of King's College Hospital is an object of paramount importance." In the course of his remarks, the right hon. and learned judge expressed his belief, that this country was almost entirely singular in regard to other empires, in trusting to the benevolent feelings of the people for the relief and recovery of the sick poor. In every large kingdom in Europe, provision was made out of the public funds for the maintenance of those large hospitals which might be seen at Paris, Vienna, and elsewhere. But in this country there was a large amount of Christian feeling and principle, to which the Government might with confidence leave the good work of providing institutions of this noble character. The resolution was seconded by the Bishop of St. Asaph, and adopted unanimously. Lord Feversham moved a vote of thanks to the Duke of Cambridge, which was seconded by Mr. Justice Coleridge, and carried. The Royal Duke, in expressing his acknowledgments, observed that it had been said the citizens and inhabitants of London were somewhat backward in coming forward to support public charities, but he could not subscribe to that doctrine. He thought the inhabitants of London were peculiar in the liberality of their donations. It was true the large Institutions of this metropolis required great assistance, and they must strive ever to keep alive the interest of the people in those Institutions. (Cheers.) It would be gratifying to the meeting to be informed that no less a sum than £15,000 had already been contributed to the fund. (Cheers.) The National Anthem was then sung, and the meeting separated.

NETLEY HOSPITAL.—The following is a copy of a Memorial from the Medical Practitioners to the Mayor of Southampton. "We the undersigned members of the Medical Profession practising in and around Southampton, beg to represent to your Worship, that in consequence of the statements that have appeared in the public papers, and which have been repeated in the debates in Parliament as to the alleged insalubrity of Southampton and of the district in which the new Military Hospital is in course of erection, have instituted very careful inquiries into the subject; and we now desire to express our deliberate conviction that the said statements are without foundation, and have originated in a complete misconception of the physical and climatic characteristics of this part of the country: and that not only is our individual experience subservive of the truth of such statements, but it completely establishes the almost entire absence of Ague, and the comparatively rare occurrence of Fever in these localities; a conclusion which is fully borne out by the general Register of Deaths, as well as the Parochial Register of Sickness and Mortality of the Parishes of St. Mary Extra, Bursledon, Hamble, and Hound, in which district the Victoria Hospital is now being erected. We therefore record our firm and unanimous opinion that in a sanatory point of view the

site of the said Hospital has been wisely selected, and that there is no proof nor any probability that danger will accrue to its inmates from malarious or other endemic diseases. William Samways Oke, M.D., Ext. Licent., R.C.P.L.; Joseph Stace, M.R.C.S., Eng., 39 years resident; Robert S. Fowler, M.R.C.S., Eng.; Henry Dusatoy, J.P., M.R.C.S. & L.A.S.; Thomas Shutter, M.D., retired list, Bengal Service, resident of ten years' standing, but not a candidate for practice; Joseph Bullar, M.D.; Joseph H. Jeans, M.R.C.S., L.A.C., M.D.; Henry Bencraft, M.R.C.S. Eng. L.A.C.; John Wiblin, F.R.C.S. Medical Superintendent of Quarantine; John H. Aldridge, M.D., M.R.C.S., L.A.C.; Edwin Hearne, M.B., London; Charles Pardey, M.B., &c.; J. Shorto, M.R.C.S., Eng.; Patrick Mackey, L.A.C., 32 years resident in Southampton as Assistant and Practitioner, and one well acquainted with the neighbourhood to which this paper refers, having been for several years parish surgeon in that district, and still and for the last six years holding the same status in the united parishes of Southampton; J. M. Simpson, M.R.C.S., Eng.; William Bullar, M.D.; Joseph Marshall, M.D.; Alex. Harvey, M.D.; J. King Sampson, L.R.C.S., L.A.C.; Edward T. Hall, M.R.C.S., & L.A.S.; John Osborn, M.D., F.R.C.S., Eng.; Frederick Smith, M.R.C.S., & L.A.C.; Geo. H. K. Lake, M.D., M.R.C.S., L.A.C.; Thomas Ward, M.R.C.S., & L.A.S.; James R. Ware, M.R.C.L.S., & L.A.C.; Thomas Simpson, M.R.C.S., Eng.; Robert Bates, M.R.C.S., L.A.C., Botley; Samuel Churchill, M.D., Fawley; Edward H. Maul, M.D., Edin.; Francis Cooper, M.R.C.S., Officer of Health; George Cheesman, M.R.C.S. & L.A.C.; Geo. Edward Webster, M.R.C.S.; William Sims, M.R.C.S., L.A.C.

NETLEY HOSPITAL.—The following are extracts from a report by Mr. Cooper, the Officer of Health for Southampton, on the site of the New Military Hospital:—"The site of the Hospital is not only beautiful, but salubrious, standing on the slope of a plateau of common land, which extends over an area of more than twenty miles, which rises gradually from the sea to a height of several hundred feet towards the Bittern Hills, and which, from its gradual inclination and porous soil, not only presents the means of a natural and perfect drainage; but which, from its wide and extended acreage, presents an open space of great extent, and over which the air has a free and uninterrupted circulation, and across which the atmospheric current is as free and pure as in any part of England. The Hospital itself stands at an elevation of about fifty feet above high-water mark, and above five hundred yards from the highest tide. The beach is shingle, and a little distance seaward is covered with sand and mud, the result of marine vegetation and alluvial deposit, brought down by the rivers Test and Itchen. In some parts the mud is of considerable depth, underlaid by blue clay and sand; in others the mud is not deep; but in no instance, that I am aware of, has sulphuretted hydrogen been known, except where sewage matter has been deposited; and in no part of the river or sea side is there any marsh such as has been represented by the speakers on the Netley Hospital question. I wish to guard myself scrupulously, however, in the present matter against any opinion, except as concerns the site and neighbouring locality of the Hospital—and I unhesitatingly repeat that a finer or healthier site could not be found. The charge of the ground being marshy is simply incorrect: the foundation of the Hospital is on rubbly gravel, which is underlaid by brick earth or clay mixed with veins of sand. Geologically, no finer or more salubrious site could be chosen, as the strata of earth renders it impossible for damp to exist if the most ordinary means of drainage be adopted; and, indeed, the nature and slope of the whole plateau of common render dampness or bog impossible. The opinions, therefore, which have been pronounced against the position of Netley have been given in error. The level of the Hospital above the sea is such as to secure it from any amount of marine or other exhalation, and its aspect towards the water such as to secure a good sea breeze a great part of the twenty-four hours, a strong current of air being always caused by the flow and ebb of the tide, and the sweep of the land on the north and north-east being so extensive as to secure at all times an unimpeded circulation of air. Nothing can be finer than Netley—a pure and rather bracing air, a clear and unsmoked atmosphere, a fine water view, where ships and steamers are constantly passing, and where the eye, on which much depends in disease, will look in vain for anything to offend or give it annoyance; but where everything is picturesque and beautiful, where nature has teemingly poured

forth her beauties to enlighten the sight and cheer the mind, and where the invalid from every clime may find congenial enjoyment, repose, and health."

HER MAJESTY'S LEVEE.—The following Medical men attended the court levee on Thursday week:—Sir J. Clark, Sir H. Holland, Sir J. Eyre. *Doctors.*—F. Bird, Edward Smith, Ashley, B.A. Kent, E. Meryon, N. Arnott, R. Bright, P. Fraser, Forbes Winslow, J. B. Harrison, Ludlow, Routh, C. Hood, Andrew Smith, Pickford, Travers Twiss, and Mr. Erasmus Wilson. The following presentations to the Queen took place at the same levée, the names having been previously left at the Lord Chamberlain's office, and submitted for Her Majesty's approval:—Dr. George Anderson, by the Duke of Cambridge; Dr. A. Armstrong, R.N., on return from foreign service, by the Earl of Enniskillen; Dr. T. Graham Balfour, Royal Military Asylum, on promotion, by Lord Panmure; Dr. Beith, R.N., by Sir J. Liddell; Surgeon-Major J. A. Bostock, on return from the Crimea, by the Duke of Cambridge; Staff-Surgeon Dr. Breslin, by the Duke of Cambridge; Assistant-Surgeon C. Daniell, on return from foreign service, by General Sir H. Ross; Assistant-Surgeon A. G. Elkington, on return from the Crimea, by the Duke of Cambridge; Dr. Fraser, on promotion and return from foreign service, by General Earl Beauchamp; Dr. Hinxman, by Le Chévalier Hebelier; Mr. J. Wyatt, by F. M. the Earl of Strafford; Surgeon P. G. Lay, on return from India, by the Chairman of the East India Company; Sir C. Locock, on being erected a Baronet, by the Duke of Norfolk; Assistant Surgeon A. M'Clure, R.N., on appointment to Her Majesty's ship Cumberland, by Rear Admiral P. W. P. Wallis; Assistant-Surgeon W. A. Mackinnon, by H.R.H. the Duke of Cambridge; Dr. A. E. Mackay, R.N., on his appointment as Staff Surgeon to H.M.S. Cumberland, by Rear Admiral P. W. P. Wallis; Mr. Domville, on return from abroad, by Sir Adm. C. Ogle; Mr. W. M. Ogilvie, by Sir J. Liddell; Dr. Ramsbotham, by Mr. Vansittart, M.P.; Dr. Ray, by Colonel Tait; Surgeon Henry Sanders, by the Earl of Erroll; Dr. Scott, by Sir F. Love; Dr. Snow, by Sir J. Clark; Mr. R. W. Tamplin, by the Earl of Shaftesbury.

MR. J. H. TUCKER, SURGEON, BERNERS-STREET.—The sympathies of the Profession are earnestly appealed to by a few Professional brethren in behalf of Mr. Tucker, of Berners-street, who, by a severe visitation in the decline of life, is now utterly prostrated in body and mind, and rendered incapable of providing for himself by Professional exertion—an affliction which is rendered doubly calamitous from his being wholly without the means of support. For nearly half-a-century Mr. Tucker has been engaged in a laborious but not very profitable practice, in which his kindness to the poor has been as conspicuous as his industry. He is known and respected by a large circle of friends and patients, many of whom will long hold him in affectionate remembrance. His successful efforts in behalf of the widow and orphans of a highly-esteemed member of the Profession, the late Dr. Nuttall, are still in the recollection of many who co-operated with him in that most praiseworthy undertaking. The Epidemiological Society owes its origin to Mr. Tucker, he having been its founder, and up to the period of his attack, a few months ago, one of its honorary secretaries. He has, therefore, in this his hour of need, claims on his Professional brethren and on the public for help and succour. It is proposed to raise by subscription a sum of money for the purpose of providing for his wants, either by annuity, or in such manner as circumstances shall hereafter determine. The following gentlemen, to whom he was well known, have joined themselves into a committee for this purpose, namely—Dr. Babington (Chairman), 31, George-street, Hanover-square; Dr. M'William, 14, Trinity-square, Tower-hill; Dr. Camps, 40, Park-street, Grosvenor-square; Mr. Hunt, 23, Alfred-place, Bedford-square; by any of whom subscriptions will be thankfully received. Sir S. Scott and Co., Bankers, 1, Cavendish-square, have also kindly consented to receive contributions. The Committee have the pleasure of announcing the following donations:—Sir B. C. Brodie, Bart., £5 5s.; Dr. Babington, £5 5s.; Dr. Walter Lewis, £5 5s.; Dr. Camps, £1 1s.; Mr. Hunt, £1 1s.; J. O. M'William, £1 1s.; Mr. Charles L. Bradley, £1 1s.; Dr. James Birch, £2 2s.; C. F. Lord, Esq., £1 1s.; Dr. Cross, £1 1s.; Dr. Seaton, £1 1s.; Dr. Leamouth, £5; Dr. C. J. B. Aldis, £1 1s.

POOR-LAW MEDICAL REFORM.—The following are copies of Petitions to Parliament from the College of Surgeons and the Apothecaries' Company:—"To the Honourable the Commons of the United Kingdom, in Parliament assembled, the humble petition of the undersigned Members of the Council of the Royal College of Surgeons of England, sheweth, —That in discharge of the duty of maintaining the character of the Medical Profession, and of promoting the respectability of the members of this College, we cordially support the petition of the Poor-law Medical officers. That in our opinion the scale of remuneration, which, as set forth in their petition, is adopted by the Guardians of Poor-law Unions and sanctioned by the Poor-law Board, is wholly inadequate to recompense the responsible, skilled, and onerous services of gentlemen whose education for the Medical Profession is at once laborious, lengthened, and expensive; and that we believe the Poor-law Medical officers are now induced to give their professional aid little more than gratuitously, partly in consequence of their habitual sympathy with the poor, and partly in consequence of the hard necessity of preserving their professional connexions from intrusive rivalry. And your Petitioners respectfully submit that the employment of Practitioners possessing only the single qualification,—a measure enforced upon the Guardians by their inability to obtain the services of gentlemen possessing the complete qualification by reason of the low scale of remuneration,—is equally injurious to the poor and to the Profession, and in their judgment condemnatory of the existing regulations. Your Petitioners therefore humbly pray your Honourable House to take into favourable consideration the petition of the Poor-law Medical officers, now before your Honourable House, and to afford them the relief they ask. And your Petitioners will ever pray, etc.

BENJAMIN TRAVERS, President.

EDWARD STANLEY,

JOSEPH HENRY GREEN, } Vice-Presidents.

WM. LAWRENCE.

B. C. BRODIE.

JOSEPH SWAN.

J. M. ARNOTT.

JOHN F. SOUTH.

CÆSAR H. HAWKINS.

JAMES LUKE.

F. C. SKEY.

J. HODGSON.

THOS. WORMALD.

JOHN BISHOP.

GILBERT MACKMURDO.

F. KIERNAN.

WM. COULSON.

RICHARD PARTRIDGE.

JOHN HILTON.

RICH. QUAIN.

EDWARD COCK.

SAMUEL SOLLY.

"TO THE HONOURABLE THE COMMONS OF THE UNITED KINGDOM OF GREAT BRITAIN AND IRELAND IN PARLIAMENT ASSEMBLED, the humble petition of John Francis de Grave, the Master of the Society of the Art and Mystery of Apothecaries of the City of London; and Jeronimo Simoens and James Saner, the Wardens of the same Society, humbly sheweth,—That the Poor-law Medical officers complain of numerous and severe grievances, for the relief of which they are now soliciting the interference of your Honourable House. That the Poor-law Medical officers are, or ought to be, Licentiates of the Society of Apothecaries. That the Society believes that the complaints of the Poor-law Medical Officers are just, and well deserve the serious attention of the Legislature. The amount of money paid to the Poor-law Medical officers is, in a large proportion of cases, so small, that it would be absurd to speak of it as a remuneration for services, indeed it is doubtful whether the payment can equal the cost of the medicine supplied. Your Petitioners consider that they are not advocating the interests of the Poor-law Medical officers only, but also the best interests of millions of their poorer fellow-subjects. Your Petitioners rely with confidence on the wisdom and benevolence of Parliament. And humbly pray that your Honourable House will be pleased to grant the relief sought by the Poor-law Medical officers.

J. F. DE GRAVE,

J. SIMOENS,

JAMES SANER.

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 20, 1857.

BIRTHS.

Births of Boys, 764; Girls, 763; Total, 1527.

Average of 10 corresponding weeks, 1847-56, 1464.7.

DEATHS REGISTERED DURING THE WEEK.

CAUSES OF DEATH.	In the Week ending Saturday, June 20, 1857.						
	Deaths of Persons.						Averages of Temperature and Deaths in 10 Weeks.
	AT ALL AGES. Mean temp. 60.3	Under 20 Years of Age.	At 20 and under 40 Years of Age.	At 40 and under 60 Years of Age.	At 60 and under 80 Years of Age.	At 80 Years of Age and Upwards.	
Mean Temperature	60.3						57.9
ALL CAUSES	987	482	162	170	144	29	965.9
SPECIFIED CAUSES	983	480	160	170	144	29	957.2
DISEASES:—							
1. Zymotic Class	197	158	11	10	17	1	234.9
2. Dropsy, Cancer, and others of uncertain seat	37	5	4	17	10	1	40.1
3. Tubercular Class	189	73	72	39	5	..	183.8
4. Of Brain, Nerves, etc. ..	110	50	13	23	22	2	113.6
5. Of Heart, etc.	43	2	5	18	16	2	36.3
6. Of Respiratory Organs ..	119	57	13	23	24	2	116.9
7. Of Digestive Organs ..	81	36	16	20	9	..	58.7
8. Of Kidneys, etc.	14	2	3	4	5	..	13.7
9. Of Uterus; viz.—Puer- peral Disease, etc.	10	4	5	1	..	..	7.5
10. Of Joints, Bones; viz.— Rheumatism, etc.	7	3	1	..	3	..	8.0
11. Of Skin, etc.	3	..	..	1	1	1	1.9
12. Malformations	4	4	..	..	..	..	3.5
13. Debility from Premature Birth, etc.	24	24	..	..	..	..	26.1
14. Atrophy	27	22	..	..	5	..	26.7
15. Age	35	..	..	..	18	17	37.7
16. Sudden	11	7	..	2	2	..	10.1
17. Violence, Privation, etc. ..	72	33	17	12	7	3	37.6
CAUSES NOT SPECIFIED	4	2	2	..	..	..	8.8

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer ..	...	...	...	...	...	29.882 in.
Mean temperature .. ..	...	...	...	...	...	60.3
Highest point of thermometer ..	...	...	...	...	...	84.0
Lowest point of thermometer ..	...	...	...	...	...	38.8
Mean dew-point temperature ..	...	...	...	...	...	51.2
General direction of wind ..	...	...	...	...	...	N.E.
Whole amount of rain in the week ..	...	...	...	...	...	0.85
Amount of horizontal movement of air in the week ..	...	...	...	...	...	1725 miles.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Pop- ulation. 1851.	Small- pox.	Measles.	Scar- latina.	Hoop- ing- Cough.	Dia- rrhoea.	Ty- phus.
West	376,427	..	1	4	8	6	7
North	490,396	3	6	5	9	7	12
Central ..	393,256	..	6	1	9	2	2
East	485,522	1	14	9	7	12	5
South	616,635	..	7	1	9	8	8
Total ..	2,362,236	4	34	20	42	35	34

TO CORRESPONDENTS.

A notice from the Honorary Secretary of the London Hospital Medical College arrived after the publication of our last week's number.

M. A. B.—We do not believe "bringing up by hand" to be by any means so favourable to the infant as a good wet-nurse.

The invitation of the "Committee for the completion of King's College Hospital" to attend their meeting last Saturday arrived after the termination of the meeting.

Medicus.—A trip to sea.

A Liverpool Student will find all the regulations of the College and Hall in our last Student's Number.

WONDERS WILL NEVER CEASE!!

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I have for many years been in the possession of a discovery which is an antidote for scrofula, the basis of consumption, which disease it will cure. It is the "acacia charcoal," prepared by electricity. And, if you think proper to give the Medical Profession and humanity the advantages of it, you may publish this communication, and I shall be most happy to establish the truth of it under the criticisms of any number of respectable persons appointed for the purpose. I am, &c.

12, Bernard-street, Primrose-hill, London.

W. W. EVANS.

A Country Practitioner should append his name to the letter.

Query.—The question is not intelligible.

M.R.C.S.—The account of the "Epidemic in Belgravia" could not be published without exposure to an action for libel.

ANOTHER CURE FOR CONSUMPTION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In the *Medical Times* of Saturday last I find that you acknowledge a communication from Dr. Churchill, referring to a secret remedy for consumption.

Will you kindly allow me to inform the Profession through the medium of your well-spread Journal, that ten years ago I discovered, while pursuing some researches on the treatment of phthisis, that the nitrate of silver was absolutely a specific in this disease. I have since fairly tried it in more than 100 cases, and can safely assert that 9 out of 10 cases will recover under its use, even if commenced at a late stage of the disease. I have effected cures in very advanced stages of the disease; but if tried at the last stage, although the symptoms may seem to be suspended for a time, yet the patient must ultimately succumb. In pure laryngeal phthisis it will be found to palliate the disease, but I know of no instance of a cure.

On some future occasion I will enter more into detail on this subject, and will only state that the dose in which I give it is from one-fourth to one-sixth of a grain with a grain of Dover's powder, three times a day. The pills are generally made up with mucilage and decorticated liquorice—not bread crumb, cod-liver oil being also administered when it can be borne.

I am, &c.

P. A. BRADY.

Bradford, June 24, 1857.

A Future Botanist.—1. The Linnæan system alone is not considered sufficient. 2. Dr. Lindley's work.

Students.—An examination for the degree of Bachelor of Medicine in the University of London will take place on Monday, August 3; that for Bachelor of Arts on Monday, October 6; and that for Doctor of Medicine on Monday, November 23. There will be a second examination for the degree of Bachelor of Medicine in November.

Erinensis.—Every ship carrying 100 passengers must have a duly authorized Physician, Surgeon, or Apothecary on board.

Mr. Broughton.—The Coroner should order payment to the Medical witnesses directly after the inquiry is concluded.

A Parish Surgeon.—If a Surgeon be called by the police to attend a sick person at a station, the police authorities must pay 3s. 6d. for a visit in the day-time, and 7s. after 9 p.m.

COMMUNICATIONS have been received from—

DR. ROBERT LEE; PROFESSOR HUXLEY; PRESIDENT AND FELLOWS OF THE ROYAL COLLEGE OF PHYSICIANS; MR. JOHN ADAMS; DR. HYDE SALTER; DR. LANKESTER; MR. TOYNBEE; DR. ALDIS; DR. FENWICK; MR. BRONHURST; MR. GRAMSHAW; MR. C. WILLIAMS; MR. MARKWICK; MR. JOSEPH ADAMS; DR. RUMBALL; SECRETARY, GENERAL BOARD OF HEALTH; MR. CHEVALLIER; MR. DEBENHAM; MR. CLARKE; DR. G. SMITH; MR. HINTON; MR. FERNIE; MR. STUTTER; MR. J. WAY; DR. T. SIMPLON; MR. W. WOOD; MR. KITCHIN; MR. JEFFREYS; DR. BROWN; MR. MAXWELL; MR. REEVE; MR. NAYLOR; MR. BRADY; DR. BUCKNILL; MR. WIBLIN.

APPOINTMENTS FOR THE WEEK.

27. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing Cross, 1 p.m.

ROYAL COLLEGE OF PHYSICIANS—*Hanoverian Oration*, 4 p.m.: by Dr. Copland.

29. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.; Orthopædic Hospital, 3 p.m.

30. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

1. Wednesday (July).

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 3 p.m.

2. Thursday.

Operations at St. George's, 1 p.m.; Middlesex, 12½ p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.

ZOOLOGICAL SOCIETY, 3 p.m.

3. Friday.

Operations at the Moorfields Ophthalmic, 10 a.m.; Westminster Ophthalmic, 1½ p.m.

EXPECTED OPERATIONS.

On Tuesday next, at the Westminster Hospital, by Mr. Holt, an excision of the knee in a child; an operation for stricture of the urethra; and an injection with iodine of an iliac abscess.

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